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FUNCTIONAL CATEGORIES IN ENGLISH

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VOLUME 1

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INTRODUCTORY REMARKS

1.0. The present volume is an attempt to deal with the traditional concept of '*parts of speech*', in particular the '*grammatical categories/inflectional categories*' traditionally associated with the major parts of speech, such as *number*, *determination*, *tense*, *mood*, *aspect*, *gender* and *case*, from the viewpoint of more or less recent achievements in linguistic theory.

If we consider language as an object of study we notice that just like any other object we can devise an infinity of models. The descriptions existent so far could be divided into (approximately) three groups:

- **traditional descriptions**, which can hardly be called models since the aim of traditional grammarians was not to construct an explanation of how language works but rather to observe and enumerate as large a number of facts of language as possible;
- **structural descriptions**, in which the systematic character of language is clearly and explicitly pointed out and which consider each language as a coherent, homogeneous entity, and
- **generative models** which describe language as a body of rules (processes) by means of which all the sentences can be obtained. Each of the three models view grammar as divided into several compartments. These subdivisions,

or components differ from one approach to another according to the grammarians' views on the levels of analysis to be considered in linguistic analysis.

1.1. The term *morphology* is a Greek based word and means *the study of form/structure*. Actually morphology can apply to any domain of human activity that is concerned with the study of the structure of something. From a linguistic point of view morphology parallels the German *Formenlehre*, and it deals with the *internal structure* of words.

Knowledge of *word structure* is in many respects of a kind with knowledge of *sound structure* and *sentence structure*; it is part of what a language user has to know in order to be regarded as a speaker of that language and, for that reason, it is part of that knowledge of language which linguists regard as properly linguistic.

It is universally assumed that complexity of word structure is due to two types of morphological operations: *inflection* and *derivation*. Both operations add extra elements to what is known as the 'base'.

Derivational operations typically create a word of a different lexical class from that of the base but it also adds further elements of meaning: the affixes *-er/-or* turn *verbs* into *nouns* that have the meaning of *agents* or *instruments*.

Inflectional operations also add further elements but leave untouched the lexical category of the base: inflected forms like *goes* or *grammars* are just variants of one and the same word, i.e. *go* and *grammar*. *Inflection* is viewed as encompassing the grammatical markers for *number*, *gender*, *case*, *person*, *tense*, *aspect*, *mood* and *comparison*.

The richest and most involved inflectional systems are found with *nouns*, *verbs* and *adjectives*. The changes of form that a word

can undergo are triggered to a great extent by some *syntactic relation* that words can contact in a sentence. *Inflectional affixes* have the following characteristics:

- they produce closure upon words, i.e. they prohibit the further possibility of having a derivational element attached to it;
- inflected forms alternate – they are organized in *paradigms*, hence they are in *complementary distribution*; nouns, for instance, occur in parallel sets of two: hat: :hats; book: :books, etc. Since they are organized in paradigms inflectional markers are organized in *closed* sets.
- the elements of a paradigmatic set may show the phenomenon of *suppletion* i.e. one of the forms is not phonologically related to the other forms; e.g. go: :went – the form ‘went’ is said to be a suppletive form of ‘go’;
- a paradigm can be defective, i.e. it can lack a form: can: :*cans; trousers: :*trouser;
- inflections are *formal markers* (semantically they are empty, abstract) that help us delimit the lexical category of the word to which they attach; that is to say, each lexical category (major part of speech) is characterized by specific inflectional markers. In other words, inflectional markers are dependent on a certain lexical category *expressing the morpho-syntactic features* of the respective lexical category. Although they have no descriptive content they pass on the descriptive content of the category they depend on.

1.2. The basic unit of grammatical analysis in traditional theory was the ‘word’ (Lat. *dictio*), and the analysis proper began with the analysis of words operating as ‘signs’, as instruments for the description and understanding of ‘reality’, with their classification

as 'parts of speech' and with the establishment of patterns (or *paradigms*) of 'declension' and 'conjugation'. (Lyons 1969: 270). Traditional grammatical theory described words in terms of the traditional list of Aristotelian 'categories'.

The term 'category' derives from a Greek word which is otherwise translated as 'predication' (in the logical or philosophical sense of 'attributing properties' to things.) (Lyons 1969:271). In Aristotelian (and scholastic) philosophy, the 'categories' were the different modes, or ways, in which predications could be made of things. ((Lyons 1969:271). Underlying the classification of the modes of predication..... was the assumption that the physical world consists of things ('substances') which have certain properties ('accidents'). Lyons (1969:271) states that two general points should be made here. First, a clear distinction was drawn between the category of 'substance' and the other 'accidental' categories: the 'substance' was the individual thing abstracted from its 'accidental' properties. Second, it was assumed by Aristotle and his followers that the structure of language reflected the structure of the world: that words signified things according to their modes of 'being', as substances or accidents.

According to Lyons (1969: 271) a second distinction of Aristotelian philosophy relevant to the development of the traditional theory of 'parts of speech' is the distinction between 'matter' and 'form'.

Since language is both an object of analysis and the instrument to carry out the analysis, the theory of 'categories' had a double effect on traditional grammars.

The elements of language, where analysed in terms of 'matter' and 'form' and, as 'substances', were classified with respect to their 'accidental' properties and were grouped into classes ('parts of speech') according to 'their mode of signifying' the things, properties and relations to which they referred. The 'accidents' of

the word, the basic unit of traditional theories of grammatical analysis, represented the different ‘forms’ a word assumes according to its syntactic function and its particular ‘mode of signifying’.(Lyons 1969)

Certain ‘accidental categories’ were considered to be typical for particular parts of speech: nouns are inflected for *case* (nominative, accusative) and *number* (singular, plural) and belong to a particular *gender*; verbs are inflected for *tense*, *number*, *person*. Consequently, what are traditionally referred to as ‘grammatical categories’ correspond to the ‘accidental’ categories, and this explains the older term ‘accidence’ for what is also known as ‘inflectional variation’. According to Lyons (1969:273) ‘the assumed universality of the Aristotelian categories of predication promoted the further assumption that the ‘grammatical categories’ were universal features of human language: that every language necessarily manifested such categories as tense, number, case, etc; and that these categories were typical of particular ‘parts of speech’.

The Aristotelian opposition of ‘matter’ and ‘form’ was also adopted by traditional grammarians to distinguish between major and minor parts of speech. Only the major parts of speech (nouns, verbs, adjectives and adverbs) were ‘meaningful’ in the full sense of the term. The other parts of speech (*conjunctions*, *prepositions*, *pronouns*, *determiners*, *quantifiers*, etc), known as *minor parts of speech*, did not ‘signify’ anything of themselves, *but merely contributed to the total meaning of sentences by imposing upon them a certain ‘form’ or ‘organization’.*

1.3 Given the fact that in *traditional grammars* the parts of speech were delimited by reference to the Aristotelian ‘categories’, traditional grammars freely use ‘*meaning*’ in the definition of word classes, i.e. the parts of speech (noun, verb, adjective) were defined

ostensibly, in ‘notional’ terms (i.e. in terms of their ‘sense’ (or intension) or in terms of the extralinguistic entity they referred to (i.e. their reference or extension).

Curme (1947: 15) defines the *adjective* as ‘a word that is used with a noun or pronoun to describe or point out the living being or lifeless thing designated by the noun or pronoun : (a) *good boy*, (a) *bright day*, (a) *tall tree*, etc.’, and the *noun* (or substantive) is defined as “the name of a living being or lifeless thing : *Mary*, *John*, *horse* *cow*, *dog*, *hat*, *house*, *tree*, *virtue*.

The problem with ‘notional’ definitions is that they are subject to numerous counterexamples and hence are ‘circular’ : ‘virtue’ is neither a living being nor a lifeless thing, the only reason for saying that ‘virtue’ or ‘beauty’ are ‘things’ is that the words that refer to them are nouns (Lyons 1969:317), that is to say a *term* is explained by resorting to the same *term*, hence notional definitions cannot be applied without circularity; moreover, it is extremely difficult to identify the conditions under which a certain word may be said to belong to a particular part of speech, although inflectional variation (word forms or accidences) was more often than not assumed to be an important element in delimiting parts of speech: consider the following example; *the poorer protested* (or ‘*wishes father thoughts*’ (Shakespeare Henry IV); ‘poorer’ is to be considered a noun in spite of the adjectival *-er* marker, and the *noun* status of ‘poorer’ is given by its *position* after the article ‘the’.

Alongside the criterion of *meaning*, some of Curme’s definitions are almost *formal* – Pronoun, Conjunction – and some combine the criteria of ‘*meaning*’ and ‘*form*’ – Adjective. Henry Sweet (1891), for instance, employed three criteria (*form*, *meaning* and (*syntactic*)*function*, in this order) in order to delimit the parts of speech, setting up 10 parts of speech. In practice, nevertheless, the appurtenance of a word to a certain part of speech was, more

often than not, determined in terms of the *distribution* of the word, – its potentiality of occurrence in sentences relative to the occurrence of other words in the same sentence-. All grammarians who included the ‘formal’ criteria of ‘form’ and ‘grammatical function’ in defining the parts of speech resort to ‘*distribution*’.

To a large extent *traditional morphology* can be identified with the study of grammatical categories (i.e. inflectional categories) most often as sets of forms that the various ‘parts of speech’ can take. As Chomsky (1965: 170) himself stresses:

“In a traditional grammar, a particular occurrence of a noun would be described in terms of its place in a system of paradigms defined by certain inflectional categories, namely the categories of gender, number, case and declensional type. Each of these categories constitutes an independent ‘dimension’ of the paradigm, and each word has a particular ‘value’ along each of these independent dimensions”. Moreover, it could be stressed that it is traditional grammarians who noticed a very important characteristic of the grammatical categories, namely *their morpho-syntactic character*. As Matthaeus (1976) puts it: ‘*the framework of intersecting morpho-syntactic categories is the main contribution of what may reasonably be called the traditional model of description*’.

1.4 A ‘formal’ approach to the problem of defining parts of speech is the *structural approach*. Structuralist grammars regard language as a *system of relations* (actually a set of interrelated systems), the elements of which – *sounds, morphemes, words*, etc – have no validity independently of the relations of *equivalence* and *contrast* which hold between them, that is to say *structuralist grammars* do not focus on the individual units of language but rather on the *relations* holding between these units.

The principles of *distributional analysis* (considered to be definitive for ‘formal’ versus ‘notional’ grammars) were introduced and extensively discussed by Zellig Harris (1951) and his followers.

The notion of *distribution* was used to identify the smallest units of linguistic structure (i.e. *phoneme/morpheme*) and make their inventory as well as to group them together into classes. Structuralism, in any of its variants, describes language in terms of *categories* and *objects* existing *in* the language, not *outside* of it. In fact, the units of language exist *only* by virtue of their interrelations. Consequently, structural grammars attach no *special substantive significance* to parts of speech (Cornilescu 1995:189), i.e. nouns, verbs, etc. are not defined in terms of their ‘conceptual/descriptive content’.

Formal definitions, as already mentioned, attempt to establish the place of linguistic objects defined in relation to other objects (syntagmatic/paradigmatic relations), similarly defined. Some proponents of structuralism (e.g. Fries, 1957) go as far as rejecting labels like ‘noun’, ‘verb’ preferring to speak of word of class

1,2,3... *Words of class 1*, for instance are words that can fill one of the frames: ‘(the) _____ is/was good / ____s are were good’, e.g. concert, coffee, taste, container, etc. In order to establish the classes, Fries starts from a number of minimum free utterances (such as ‘the concert was good’) and by using the technique of *substitution* identifies 4 classes called *form classes* – which correspond to the *traditional major parts of speech* in that they include items with lexical meaning- and 15 classes called *function words* – items with predominantly grammatical meaning (i.e. roughly, the traditional minor parts of speech). With structuralists, there was general agreement upon the fact that notions like ‘*noun*’, ‘*adjective*’ etc. are only convenient labels in setting up convenient systems of paradigms based on distributional regularities. The concept of paradigm/syntagm is not new. In traditional grammars

the models of declension and conjugation were clear instances of paradigms while syntax was defined as dealing with syntagmatic relations. With *structural grammars*, the novelty lies in the fact that the two types of relation were considered to be *fundamental axes* in the organization of all units, on all linguistic levels. *The assumption underlying this conception is that language is organized into hierarchical levels, that these levels are interrelated and have isomorphic organization; this means that the relations that characterize the structure of one level (e.g. phonological) are analogous to the relations that characterize other levels as well (e.g. morphological/syntactic).*

With classical structuralists, the lexical items (i.e those pertaining to the traditional major parts of speech) and the grammatical items (typically the traditional minor parts of speech and inflectional affixes) are distinguished in terms of paradigmatic oppositions and fall into the two classes known as *open classes* and *closed classes* of items.

The *open classes* (nouns, verb, adjective, adverb) were defined as :

- classes that contained an indeterminately large number of items;
- classes where new members can be added by coining, borrowing, etc.

Closed classes (conjunctions, pronouns, determiners etc. and inflectional affixes) include items that have no '*descriptive content*', having a *fixed* and *limited* number of items.

The contribution of structuralism to the clarification of the status of grammatical categories is the promotion of the concept of *opposition* as a basic element in the mechanism of language. The fact that the 'values' of the grammatical categories are based on a set of *word forms* on the one hand, and on the other hand

enter into a complex of *obligatory relations* dictated by other elements in the utterance is translated in structural terms by the fact that the oppositions within each category bear upon both the paradigmatic and the syntagmatic planes. The opposition between *singular* and *plural*, expressed by the presence vs the absence of the plural morpheme e.g. *hat* – *hats*, determines an opposition between *singular* and *plural* in the verb, e.g. *the hat is on the table/ the hats are on the table*.

1.5. The *generative models* basically adopt the same attitude to the system of parts of speech in the sense that lexical or grammatical categories can be defined only through their roles in the rules and principles of the grammar.

With generative grammars, nevertheless, the term ‘*grammatical categories*’ denotes *syntactic* categories like S(entence), N(oun)P(hrase), V(erb)P(hrase), etc. i.e. apparently, Generative Transformational Grammar (GTG) excludes the inflectional categories of *number, case, gender*, etc. Generative models operate with 2 types of categories: *lexical categories* and *grammatical/syntactic categories*. Lexical categories (N, V, A) coincide with the traditional ‘*major*’ parts of speech and the structuralist ‘*open*’ distributional classes, and grammatical categories (NP, VP, AP, etc.) correspond to *phrases* or *syntagms* – specific sequences of words.

The lexical categories are defined by *features* which can be *phonological, semantic* or *syntactic*. The *inflectional (morpho-syntactic) system* of a language is acknowledged in the form of *features* which are part of the complex symbol of the lexical items and are to be found in the *lexicon*.

Each of the dimensions of the system of *paradigms* is viewed as a multivalued feature with the specification either + or -, in the case of binary oppositions (e.g. *number*). or with indices (1.....n)

in the case of multiple oppositions (case). The establishing of syntactic categories such as NP, VP, AP etc. is the result of the fact that generative transformational models include in the grammar a component which relates a structure generated by the syntactic component to a certain semantic representation. This move acknowledges the relation between *categories* and *notions* (conceptual contents). The categories of a language will have to be set up on the basis of the combinatorial properties they exhibit, but it is to be assumed that it will turn out that there are interesting and reliable relations between the *syntactic combinatorial* properties of a category and the *notional interpretation* of that category. (Cornilescu 1995:190).

An important result of recent syntactic theory is that various parts of speech display *certain categorial similarities* which can be represented in terms of *shared features*. Shared features express *cross-categorial regularities of behaviour*. In part, these features refer to the *morpho-syntactic categories* that delimit a certain part of speech.

The most important opposition for the parts of speech system is the opposition between *verbal* and *nominal* categories, parts of speech being analyzed along the dimension $[\pm V]$ or $[\pm N]$. The $[+N]$ categories (A,N), for instance, may be marked for *gender*, *number*, *case*, while the $[+V]$ categories are not characterized by these features. Adjectives and adverbs share the inflectional (functional) category of *comparison*.

Another important opposition sanctioned by recent syntactic theory is the opposition between *lexical categories* (also known as *thematic categories*) and *functional categories*. This opposition partly overlaps the structural distinction between *open* and *closed* classes of items.

The list of *functional categories* includes both *free morphemes* (determiner, quantifiers, pronouns, auxiliary verbs,

complementizers, etc.) and *bound* morphemes/*inflectional* affixes (Tense inflections, Aspect markers, Agreement/Number markers), i.e. the label *functional categories* covers ‘*minor parts of speech*’ and the ‘*inflexional categories*’.

Information expressed by *inflection* is not always dictated by syntactic structure. We could, in a way, distinguish between two types of inflection:

- inherent (the kind of inflection that is not required by the syntactic context, although it *may have syntactic relevance* (e.g. *number* in nouns (+/-plural), *gender*, *degrees of comparison*), i.e. inherent inflection designates the morphological expression of inherent morpho-syntactic properties. These have long been taken to play primarily a *semantic function*. It could be assumed that this type of inflection is morphological.

- contextual: what follows from syntax (person, number/case agreement, i.e. the expression of syntactically relevant morphosyntactic properties. These are assumed to have a primarily syntactic function. It could be assumed that this type of inflection is syntactic.

We can talk of an inherent/contextual distinction but there is no conclusive evidence that the two types of inflection occur in different modules or subcomponents, being difficult to trace a separation line between inherent and contextual features in general. There are features that are shared by both morphology and syntax, for instance ‘*tense*’.

Languages differ with respect to inflectional features: Latin/Romanian have a rich inflectional system i.e. there are specific morphemes that spell-out the morphological features. English has a poor inflectional system: very few features are morphologically realized, therefore the morphological marking of inflectional features is said to belong to *parametric variation* across languages.

Recent approach in the study of language assume the existence of a *lexicon* that is defined as a repository of individual

items and their idiosyncratic properties (i.e. properties that cannot be derived from general properties). The lexicon is assumed to include two subcomponents:

- a conceptual subcomponent (encyclopedia) including members (*lexical formatives*) pertaining to lexical categories, i.e. open classes.

- a grammatical subcomponent including *grammatical formatives* pertaining to *functional* categories: The assumption is that these formatives come in two varieties: independent functional formatives (F-morphs), such as for instance *the*, *will*, *-ing* etc. and phonologically abstract (head) features, e.g. <pst> for past tense.

1.6. It has long been assumed in linguistic literature that *inflectional morphology*, unlike *derivational morphology*, is *syntactic* and *regular* and as such constitutes a word formation module which is distinct from derivational morphology, which is *lexical* (i.e. part of the lexicon) and *irregular*.

Given this assumption, it was assumed that the compositional meaning of inflected forms would be best captured if these inflected forms were the result of syntactic processes, i.e. the inflected items, as such, are put together *in the syntax*. This meant that functional items, inflectional morphemes included, *head* functional structure. Lately, nevertheless, it has been argued (Borer 2003) that the division between inflectional and derivational morphology is *morphologically* useless. According to this point of view, inflection is indeed *regular and coherent* (and hence syntactic) in point of the *function* that inflection plays in grammar; in point of the *morpho-phonological form* of inflection *no* such claim can be made. From a morpho-phonological point of view inflection is extremely *idiosyncratic*, as remarked by structuralists such as Halle (1973) and many others. Consider as an exemplification the past tense marking in English which includes at least the instantiations below (Borer 2003:21):

- (1) walk → walked
run → ran
think → thought
drive → drove
cut → cut
read → read (/red/)
go → went

Given that there can be no correlation between *function* and morpho-phonological *form* means that we cannot maintain an isomorphism between morphological properties and semantico-syntactic properties. The suggestion, in current linguistic thought (Borer, 2003), is to radically separate *form* and *function*.

The aim of the present course is to highlight the function (syntactic and semantic) that functional items have in the grammar of a language, since our conviction is that proper knowledge of a language necessarily presupposes knowledge of the functional structure of that language.

2. Summary

As we have seen, ever since the earliest research on language, *categorization* of the lexical items that belong to the vocabulary of a language has played an important role in the description of language. The summary below heavily draws on Corver and Riemsdijk (2001).

The main dichotomy in the categorization of syntactic categories is that between *content words* (i.e. lexical or substantive categories) and *function words* (i.e. functional categories).

Content words are lexical items that have a ‘specific or detailed’ *semantic content* and as such carry the principal meaning

of the sentence. They *name* the objects (N), events (V), properties (A) and location/direction (P) that are the bedrock of the message conveyed by the sentence.

Function words, as opposed to content words, have a ‘*non-conceptual*’, *abstract* meaning and fulfill a ‘*grammatical*’ function in the sense that they ‘glue’ content words together at the level of the sentence to indicate ‘what goes with what and how’ (Corver and Riemsdijk, 2001:1). The abstract meaning of the functional domain includes such properties as: tense, definiteness, number, degree, interrogativity, etc.

One of the aims of linguistic theory has been to pinpoint the characteristics that distinguish between the two categories ‘lexical’ and ‘functional’.

One such characteristic is ‘*openness of membership*’. Content words belong to open classes of words, that is new members can be added to this class by derivational processes. Function words, on the other hand, have a fixed inventory, and once it has been learned, no members are ever added. As a result, the membership is restricted, the items falling under some function class X forming a *closed* class.

To the two properties mentioned (*semantic/descriptive content* and *restrictive class membership*) a number of other properties have been added (Emonds, 1985, Abney, 1987, among others). From a morpho-phonological point of view, function words are *phonologically* and *morphologically* dependent. They are typically *stressless*, often expressed by affixes or clitics and sometimes even null.

We mentioned above that functional categories delimit a major lexical category. What this means is that functional items typically combine with a phrase belonging to a *specific* categorial class. D(eterminer), represented by items like *the, a, my, this*, etc., combines with a noun phrase (NP) as in ‘[[_D the [_{NP} (lovely) hat]]

resulting in a determiner phrase (DP). Lexical categories, on the other hand, take different syntactic categories as complements. A verb like ‘*believe*’ may combine with a DP as in *I believe* [_{DP} *your story*] or an [acc+infinitive] clause (IP)) or that-clause (CP)) as in *I believe*[_{CP} *that he is ill*]/ *I believe*[_{IP} *him to be ill*].

Another (lexical) property that distinguishes lexical from functional categories is that the former (i.e. content words) assign semantic (thematic) argument/participant roles to the elements in their vicinity (subject and objects). Functional items like determiners (*the, this*), degree words (*how*), complementizers (*that*) do not assign any participant role to the phrases they combine with.

Another grammatical property distinguishing between *function words* and *content words* relates to displacement/movement. As noted by different linguists (e.g. Abney 1987) functional elements are inseparable from their complements (i.e. the phrases they combine with/select). Complements of lexical elements, on the contrary, can be moved away from the lexical head. As the examples below show, the clausal complement (CP) of the verb *believe* can be topicalized (cf (2c)), but the complement (IP) of the function word *that* cannot (cf. 2(b)):

- (2) a) I believe [_{CP} that [_{IP} Mary can play golf]
 b)*[_{IP} Mary can play golf]_i I believe [_{CP} that t_i]
 c) [_{CP} That Mary can play golf]_i I believe t_i

The properties identified above make it possible to classify some lexical item as belonging to one category or another. But as with all types of categorization there are elements in the vocabulary of a language which cannot be straightforwardly put under one of the two categories since they display *ambiguous* behaviour, i.e. they share properties with content words and at the same time they display functional characteristics. One such example is the case of

prepositions (P). The category P does not constitute an *open* class. Nevertheless, prepositions denoting location/direction may select their own complement (i.e. they have their own participant/argument structure). This lexical property does not extend to more *grammatical* prepositions like in the case of verbs with obligatory prepositions, or the case of the preposition *for* in the well-known *for+Acc+inf* construction in English.

Such examples have lead linguists (e.g. Ross 1972, 1973) to argue that the rigid distinction between one class and another should be replaced by a ‘squishy’ one, that is one of degree. This ‘squishy’ nature of lexical items cuts through other lexical categories as well, Ross speaking about degrees of *nouniness* and *verbiness*. According to this view syntactic categories are not necessarily distinguished from one another by the absolute presence or absence of some property X but rather they differ from each other in *relative* terms. Along these lines, Emonds (1985) points at the existence of closed classes of grammatical formatives that are *subclasses* of the lexical categories. Informally, these subclasses can be characterized as the most frequently used and least *semantically* specific members of each lexical class. Emonds calls these ‘in between’ subclasses ‘grammatical nouns, verbs, adjectives and prepositions’. Van Riemsdijk (2001) refers to such items as ‘*semi-lexical*’. Some examples of each subclass are given below (Corver and Riemsdijk, 2001:6)

- grammatical nouns: one, self, thing, place, time, body
- grammatical verbs: be, have, get, do, come, make, let
- grammatical adjectives: other, same, different, such
- grammatical adpositions: out, up (i.e. particles)

THE CATEGORY OF NUMER

INTRODUCTORY REMARKS

01. As mentioned in the introductory chapter, the **noun class** is characterized, at the *formal level*, by the morpho-syntactic features **case**, **gender** and **number** (reflected in the opposition singular-plural), without exception.

Another important property is that nominal phrases (NPs) (actually D+NP) may function as arguments (expressed syntactically as subjects and objects) and bear a participant role (theta-role) such as Agent, Patient, Theme, Experiencer, etc. It has also been argued that only DPs can have the *subject* function in a sentence. These properties derive from the categorial feature [+N] which gives the essence of nominality (Cornilescu 1995:210).

On the other hand, nouns are also characterized by *semantic features* such as [\pm concrete] [\pm animate and [\pm human] and, to some extent, [\pm count(able)], which play an important role in the ‘selectional restrictions’ between a predicate and its arguments. Roughly, these features indicate characteristics of the entities denoted by DPs and are consequently attributable to the head nouns themselves.

Traditional grammars extensively deal with the category of *number* from two points of view: a) the opposition singular-plural, and b) the distinction between countable and uncountable nouns. The first opposition is 'grammatical' in the sense that one of the two terms, namely, 'plural' is related to a morphological marker. The second distinction, closely related to the first, is semantic and has to do with the distinction between nouns denoting entities with divided reference (that can be counted) and nouns denoting entities with undivided reference (cannot be counted)

From a conceptual point of view, prototypical common nouns like *girl, book, table, water, salt* 'name', 'denote', 'designate' the set of entities in the world that have the *property* of '*being a girl, book or table, salt, water*'. In all the cases the individual entities are of the same *kind*. It would be more accurate to say that the noun denotes some property which picks out the set of entities in the world that satisfy this property. The difference between nouns like '*salt, water*' and '*book, apple*' is that the entities that belong to the set denoting '*water, salt*' are not easily individualizable so as to be able to 'count' them.

The number system applies to nouns and NPs and contrasts *singular* and *plural*. The system is important and grammatically relevant in the following domains:

- noun inflection: characteristically, plural nouns are *morphologically* marked (*car#s*) while singular nouns are unmarked.
- concord between nouns and determiners (*this car* vs *these cars*; *a car* vs *several cars*; but *another penny* vs **another money*).);
- subject-verb agreement;
- pronoun-antecedent agreement: I have seen *the children*. *They* were running to the park.

The feature [\pm count] has deeper semantic implications being, in a way, closely linked to the semantic feature [\pm individualizable/divisible], that is to say the distinction into [\pm count] is a manifestation of a semantic distinction between what may be called ‘**naturally individuatable**’ and ‘**not naturally individuatable**’ sets or types (Croft 1990) of entities. According to (Croft, 1990:267) ‘*naturally individuatable*’ types of entities are those whose members (tokens acc. to Croft) come in *natural units*: *children*, *dogs* and *tables*; they appear to be prototypical nouns. ‘*Not naturally individuatable*’ object types are those whose tokens do not come in natural units such as *liquids* and *gases*.” (Croft, 1990:267).

Chomsky (1975) observes that “...in determining that an entity is a numerable thing, we assign it to a ‘*natural kind*’ that might be designated by a **common noun**, i.e. a ‘**sortal**’ predicate. Otherwise... it is not numerable. This assignment involves assumptions about the **nature of the things named**, some conceptual and some factual. In our system of common sense, the understanding of *natural kinds* is defined by their internal structure, constitution, origin... This is not to say that we necessarily know the defining structure... but that we assume that it exists and that new entities are assigned correctly to the ‘sort’ and designated by the sortal predicate just in case they share ‘the essential properties’....This is a conceptual requirement.....we keep certain factual assumptions about the behaviour of objects fixed when we categorize them and thus take them as eligible for naming or description. Furthermore, the cognitive structure of language imposes its own conditions.” (Chomsky 1975).

0.2 Traditional grammars extensively deal with the category of **number** in English as a *category* of the noun, as reflected in the opposition *singular-plural* (e.g. *girl-girls*), as well as in the

distinction between *countable* and *uncountable* nouns (mostly *mass* nouns), going into detailed subclassification of nouns ‘*according to the idea of number*’.

Language can be considered, on the one hand, as a category of logic, to the extent it reflects, in an organized way, facts perceived in outside reality; on the other hand, language can be viewed as a category of grammar, to the extent the facts perceived in outside reality are also reflected in systematic linguistic distinctions. At the linguistic level considerations can be made both of a syntactic and a semantic nature. (T. Coliban, 1983:178).

The aim of this chapter is to give a syntactic, semantic and pragmatic account of the behaviour of common nouns (countable nouns) and mass nouns (uncountable nouns).

1. THE SORTAL / NON-SORTAL distinction

1.0. Natural languages are used to identify entities that exist in perceived reality. We could, therefore, say that **language is used to categorize perceived reality**. The perceived **spatial-temporal world** can be ‘cut’ into separate entities in different ways, i.e. there is more than one way of individuating perceived reality, and consequently of talking about it. For our purposes, we shall adopt two theoretical frames used in describing the process of individuation.

A. The first theory assumes two properties as basic for any act of individuation:

- an entity can be bound in space (and/or time)
- an entity can be continuous in space (and/or time)

· Roughly, it is assumed that an entity is **bound in a certain dimension** if the various locations along this dimension contain its *parts*, and not the whole entity again.

- (1) **Definition:** If **a** is **bound** with respect to a certain dimension **y**, then there are several cross sections of **B** (where **B** is a section of **A**) perpendicular to **y** such that each of them contains a *part of a*. (where **A** is the entire spatio-temporal area occupied by the given entity **a**)

An entity that is **continuous** in a certain dimension is defined as an entity that is not considered to have *parts* in the dimension in which it is continuous. It may be said that the entity is to be found in its entirety in the respective dimension.

- (2) **Definition:** If **a** is **continuous** with respect to a certain dimension **y** then there are several cross sections of **A** perpendicular to **y** such that each of them contains **a** as a whole. (where **A** is the entire spatio-temporal area occupied by the given entity **a**).

The most common example of entities bound in space (and continuous in time) is that of countable nouns which name *sets of entities* (or as Chomsky calls them *natural kinds*): *man, river, table*, etc. A noun like *table*, for instance, is said to have as referent the 'set of tables.'

The entities that make up the set named/designated by the common noun share some 'essential' properties, hence we could say that the noun denotes some 'property', namely the property of 'being a table'. This property picks out the set of those entities that satisfy that property in some world. (Cornilescu 1995:210).

The lexical meaning (or sense) of lexical concepts (identified in logic as *predicative expressions*) like *table*, *man*, *book* etc. can be formalized as : *book*(x), *table*(x), *man*(x), etc. This representation would qualify as the **lexical conceptual structure (LCS)** of prototypical nouns. The variable is bound by a *determiner* (the, a, this) or *quantifier* (many, some, all) turning the *predicative expression* [*table* (x)], whose referent is a set (property set), into a **term** (syntactically represented as DP) which functions as an **argument** in discourse.

The identifying characteristic of entities denoted by common nouns (from an Aristotelian point of view) is that they have *contour in space*, i.e. they come into the world with a certain *spatial shape* or *form*.

Zemach (1979) dubbed these entities as '*things*'. A 'thing' is defined with respect to its *location in space*, **but it is not** defined with respect to its location in time. In Zemach's (1979) terms this means that 'we can regard two (identically) pinshaped entities as one and the same **only if** there is a temporal distance between them. If they coexist, and there is no temporal distance between them, we say that these are two different pins'.

The most common example of entities that are **continuous in space** (and time) is that of **mass terms** such as *water*, *gold*, *ice*. The two characteristics that can be inferred are:

- they are *not* considered to come in the world with a certain *shape*, i.e. they do not have inherent form, and
- with respect to the dimension in which they are *continuous* (in our case, with respect to all dimensions), they are considered to be present *in their entirety* at all places they occupy in that dimension, i.e. any(arbitrary) perpendicular cross section of a spatial area containing **iron** or **ice**, for instance, will be **iron** or **ice**.

Zemach (1979) identified these entities as ‘*pure continuants*’ or ‘*types*’¹.

To better grasp the difference between entities that are continuous in space (and time) and entities that are bound in space (but continuous in time) let us consider for instance the count term (*the*) *river Thames* and the mass term *water*. The crucial difference between the two entities designated by ‘*river Thames*’ and ‘*water*’ is that whenever *water* is present, it is *water* (and not a certain part of water) that is present, while this is not the case with the *river Thames*. A part of the *river Thames* is not the whole entity designated by *the river Thames*.

Common countable nouns like *man*, *river*, *rabbit* etc. were called **SORTALS** (or *sortal predicates*), while mass nouns like *iron*, *water*, *ice*, *gold* were called **NON-SORTALS**. As can be noticed the **SORTAL/NON-SORTAL** distinction parallels the **COUNT/MASS** distinction which all good grammars have acknowledged for a long time.

As shown by philosophers of language (e.g. Pelletier, 1979) ‘the purpose of the sortal distinction was to be able to *apply number* to it in a definite manner and not to permit any arbitrary division of the *sortal term*. *Non-sortals do not allow number* to apply to them and arbitrary division into parts is an identification test’.

¹ A second type of non-count noun is illustrated by nouns like ‘crockery baggage, clothing, furniture underwear etc’ which cover a variety of objects united by a shared function. In the case of **crockery** for instance the objects – plates, cups, saucers, dishes- are united by their shared function with respect to food and drink. This type of *non-count nouns* do not denote *physical substances* and the ‘individuable/divisibility’ feature only applies to a certain limited extent. What distinguishes ‘water’ from ‘crockery’ is that the former is ‘homogeneous’: any subamount of water is water; the latter, i.e. ‘crockery’, denotes a heterogeneous *aggregate* of parts: is made of entities of different kinds. Crockery is uncountable because it is not inherently *bounded*, so we can subtract or add pieces and still be left with ‘crockery’.

The two properties used for the *sortal/non-sortal* distinction, as remarked by philosophers of language, is operative for individuating other types of entities as well, namely *situations*. Verb phrases like *build a house*, *play a sonata* or *buy a book* (described as ‘*events*’) share properties characteristic of *sortals*; they are **bounded** in the dimension of **time**. An ‘*event*’ is defined as an entity that exists in its entirety in the area defined by its spatio-temporal boundaries. Each part of the area contains only *a part* of the whole event. Moreover, it has been shown by many philosophers of language that the ontology and the language of *events* can be defined by using the language of *things* only. To put it differently, any fact, which can be ‘named’ by an *event* can, in principle, be expressed by using names of *things*. The only difference between ‘*things*’ and ‘*events*’ is that the latter are bounded both in the dimension of *time* and in the dimension of *space* (cf. Zemach (1979)).

Situations designated by expressions like *running*, *playing the piano*, *walking in the park*, etc. are describable in terms of the properties of individuation used for *iron*, *gold*, *water*, i.e. *playing the piano*, describes a situation that is *continuous* in the dimension of time and any cross-section of this dimension includes the situation in its entirety, i.e. just like mass nouns, they are considered to be in their entirety at all places they occupy in the dimension in which they are defined. These entities, named ‘*processes*’ by Zemach (1979), are continuous in time and space.

B. The individuation process has also been studied from the point of view of **mereological logic**, i.e. the logic of the part-whole relationship. The relation between the whole and its parts can be defined by two properties:

- subdivisibility versus anti-subdivisibility
- additivity versus anti-additivity

The two theories are intertranslatable. Non-sortal terms represented by nouns like *iron*, *salt*, *gold* are **subdivisible** and **additive**. If we divide a *lump of gold* into smaller lumps of gold we still have *gold*. Thus mass nouns (which are *non-sortals*) are **subdivisible**. The same property is sometimes called ‘**homogeneity**’. If we add *gold* to *gold* what we get is a larger *lump of gold*. Non-sortal terms such as mass nouns are **additive**. This property can be identified by Quine’s (1979) test of ‘**cumulative reference**’: any sum of parts, which are water, is water.

Sortals like *man*, *rabbit*, *table*, *river* do not share these properties. They are, on the contrary, **anti-subdivisible** and **anti-additive**. To put it roughly, parts of a *table* such as the legs of a table or its top do not stand for the table, or several *rabbits* put together do not form a larger rabbit.

The semantic properties that distinguish between **sortals/countable nouns** and **non-sortals/mass terms** have a direct reflex in their syntactic behaviour.

Syntactically, sortals, i.e. countable nouns, collocate with:

- the indefinite article a(n);
- the plural morpheme;
- the quantifiers each, every, many, few (‘enumeratives’ according to Ware (1979));
- they take cardinal numerals;
- they trigger plural verbs and plural anaphoric pronouns:

- (3) (i) a/every/each book – many/few/seven books
- (ii) Five children are playing in the garden. They are having great fun.

Non-sortal terms, i.e. uncountable nouns, have the following syntactic characteristics:

- resistance to pluralization;

- resistance to the co-occurrence with the indefinite article;
- combination with specific quantifiers (known as ‘amassives’).

These restrictions on mass terms result from **the lack of in-built modes of deviding their reference** (it was argued that mass terms have *cumulative, additive* reference). Mass nouns, therefore, do not admit cardinal numbers, or the indefinite article. They only allow:

- mass quantifiers such as much, little (‘amassives’ according to Ware (1979), or amount quantifiers like a lot of, an amount of;
- singular agreement with the verb and singular anaphoric pronoun.

- (4) (i) much /little wine/iron/love/attention
 (ii) Wine is healthy. It is pleasant to drink on an idle afternoon.

In what follows, we shall discuss in more detail *countable* and *uncountable* nouns as representative items of what the philosophers termed ‘*sortal* and *non-sortal*’ predicates respectively, but before we embark upon this discussion, we would like to introduce another very useful theory for the matter at hand, widely adopted in theoretical linguistics and extremely useful in the discussion of the recategorization of mass terms.

C. The theoretical frame we are going to introduce is the one suggested by Carlson (1979). Carlson regards the set of entities as consisting of at least three disjoint subdomains, or subtypes: **stages**, **objects** and **kinds**.

The domains of objects and kinds are regarded as constituted of **individuals**. **Stages** are regarded as entities too, but they are

not individuals, and thus are never named. Only individuals bear names (*proper names* and *common names*). Stages are essentially time-space slices of individuals.

Of these subtypes, '*objects*' are the most familiar and could be identified with *sortal terms* (and with 'things' in Zemach's (1979) classification). The characteristic property of *object-level* individuals is that they are defined by **spatial boundaries**. Object-level individuals are generally confined to one location at a given time. Expressions designating *object-level individuals* could be for instance: *John, Covent Garden, the book on the table, the chair I now occupy, my cat, etc.*

The domain of '*kinds*' is likewise regarded as constituted of sui-generis individuals, these individuals being (possible) *kinds of things*. These individuals have certain peculiarities as compared to normal individuals, i.e. kinds can be here and there (they are continuous in space/time), whereas as we have seen normal individuals are generally confined to one location at a given time (they are bound in space/time). Kind-level individuals could be identified with *non-sortals*, the characteristic property being that they are continuous in space (as well as time). Zemach (1979) called these types of entities 'pure continuants' or 'types'.

According to Carlson (1979) just as there are proper names for *objects* (normal/ordinary individuals), such as *John* or *Fido*, there are also constructions in English, which serve as **proper names for kinds**.

Bare plurals (i.e. noun phrases with zero or null determiner) such as *men, dogs, students*, etc. function as **proper names for kinds**. Kind referring expressions should not be identified with *classes* or *sets of objects*, i.e. one object+another object+....+another object. Thus, while *tigers are striped* is true of the kind *tigers*, it may *not* be true of the set or class of tigers, since *some* tigers may *not* be striped. Jespersen (1931) gives us a

list of constructions in English that may be used to designate kind-level individuals:

- mass terms: **Money** is no good except when it is spread
- noun phrases with a definite article: **The lion** is a mammal
- expressions like: 'this kind of...': **This kind of** animal is ferocious
- 'bare plurals' i.e. constructions made up of noun phrases with the zero or null determiner: **Lions** are **mammals**.

The fact which led Carlson (1979) to regard the domain of *kinds* as a domain of individuals, distinct from that of *objects*, is that there is a group of English predicates which apply, meaningfully, only to the domain of *kinds*. These are such predicates (non-sortal predicates) as: *be widespread*, *be extinct*, *be common*, *be in short supply*, *be everywhere*, *come in many sizes*, *be indigenous*, etc. which all appear felicitously with *bare plurals* or with *kind-denoting* DP subjects.

- (5) (i) Tigers are widespread/extinct/common/in short supply
(ii) This kind of animal is common/extinct/everywhere
(iii) ??Several tigers/most tigers are widespread/in short supply
(iv) * Fido is in short supply/extinct.

Stages, the third subtype, are essentially *time-space slices* of individuals (objects or kinds). Though they are regarded as entities, they are *not* individuals, and thus are never named. As already mentioned, only individuals may bear names (proper or common names). *Stages* could be viewed as *parts of objects/kinds* in an underlying mereological logic. In general, verbs that may take the progressive form refer to stage-level interpretations of their subject nominals, while state verbs (described as individual level

predicates) may predicate of objects and kinds but never stages. Stage-level predicates speak of events and occurrences that have a distinctly temporal tenor (i.e. they describe situations that are restricted in time and space. Compare:

- (6) (i) He is a fool (characteristic property of the subject irrespective of any time anchorage (object-level individual);
 (ii) He is being a fool (= acting foolishly at the moment *now* (stage-level subject)).

Below is a list of examples of some **predicates** that apply to **stages** and some that apply to **objects/kinds** i.e. *individual level predicates*; individual level predicates refer to more or less permanent properties or situations. As the examples show, most nominal predicates apply to objects, while the majority of prepositional phrases (PrepP) in predicate position apply to stages (especially the locatives). Adjectives appear to constitute a mixed group, with the majority applying to objects:

(7) Stages	Objects
run into the room	know how to dance
found a book	have cars
(be) in the next room	(be) a turtle/an orphan
(be) present/available	(be) intelligent/tall
(be) on top of the house	weigh 250 kg
(be) drunk	be sick (mentally)
(be) running about	love/like/own/
be on top of the house	

As we shall see in our discussion of mass terms and, later on, in our discussion of the category of *aspect*, we employ terms that designate entities recognized by each of these domains in a somewhat

mixed fashion. What we mean is that we can identify different types of relations that may possibly hold between the terms designating **objects**, **kinds** and **stages**. *Kind-level individuals* may have realizations or manifestations on two levels ‘**objects**’ and ‘**stages**’.

Intuitively, if an *object* is an object of a certain *kind*, that *object* is said to realize the *kind*. ‘**Objects**’, on the other hand, may have only ‘**stages**’ as realizations. Consider the examples below:

- (8)
- (i) John is a fool (object-level reading; characteristic property)
 - (ii) John is being a fool (a stage of the object John; existential reading)
 - (iii) Dogs don’t know how to ride a bicycle (kind reading; generic)
 - (iv) Dogs ran into the house (a stage of the kind ‘dogs’; existential reading)

The ontology we have just introduced will be crucial in the analysis of mass noun recategorization, as well as in the interpretation of the generic uses of the definite and indefinite articles. As we shall see, for instance, a mass term, as a typical example of a kind-level individual, may contextually recategorize into a countable term which designates an ‘object-level individual’, or ‘a stage of an individual’.

2. SORTAL TERMS – COUNTABLE NOUNS

2.1. SEMANTIC AND SYNTACTIC CHARACTERIZATION

As already mentioned, at the semantic level countable nouns are considered to be *sortals*. This semantic characterization has to do with the process of individuation. No division of a sortal term

in the spatial area can yield the entity as a whole. It is said that sortal terms have *in-build-modes of deviding their reference* – so that we distinguish between *one rabbit, another rabbit*, etc.

The fact that *sortals* devide their reference accounts for the application of number to them. Countable or sortal terms are also known as **general terms**, which are contrasted to **singular terms** (terms that have unique reference). Quine (1960: 90) stated that ‘semantically the distinction between **singular** and **general terms** is that a **singular term** names or purports to name one (unique) object,...while a **general term** is true of each, severally, of any number of objects’. General terms are also characterized by having a certain *shape* or form. Pragmatically, it appears that speakers employ sortal terms when they wish to designate individual objects. The semantic properties of general terms provide an explanation for the syntactic characteristics mentioned above and repeated here for convinience:

- they allow countable quantifiers like many, few, each, every;
- they are individuated by means of the indefinite article a(n) and occur with cardinal numbers
- if used in the plural form they trigger plural agreement with the verb and determiners and plural anaphoric pronouns.

- (9) (i) She asked Ralph to show her *the pictures*; there *were* a great many *of them* in the house, most *of them* of his own choosing.
- (ii) He lived alone in *a little log house*. It had a single door and, directly opposite, *a window*.
- (iii) Ralph took *a candlestick* and moved about, pointing out *the things*; Isabel, bending toward *one picture* after *another*, indulged in little *exclamations* and *murmurs*.

2.2. THE PLURAL MORPHEME

In general, countable nouns form the plural by adding the inflectional morpheme #s which is phonologically interpreted as /iz/, /z/ and /s/, depending on the stem final segment.

Although the *plural form* has often been taken as a criterion of distinguishing between *countable* nouns and *uncountable* nouns, this criterion is very often unreliable and clouding the issue. Words like *deer*, *scissors*, *measles*, *politics* can often make us become confused, not to mention the fact that the form of the plural morpheme isn't always the same. Consider for instance the following set of singular/plural pairs (cf. Harley 2003:8):

(9')	Singular	Plural
a)	<i>dog</i>	<i>dogs</i>
	<i>cat</i>	<i>cats</i>
	<i>witch</i>	<i>witches</i>
b)	<i>alumnus</i>	<i>alumni</i>
	<i>focus</i>	<i>foci</i>
	<i>cactus</i>	<i>cacti</i>
	<i>radius</i>	<i>radii</i>
c)	<i>sheep</i>	<i>sheep</i>
	<i>fish</i>	<i>fish</i>
	<i>quail</i>	<i>quail</i>
	<i>shrimp</i>	<i>shrimp</i>
	<i>bison</i>	<i>bison</i>
d)	<i>addendum</i>	<i>addenda</i>
	<i>curriculum</i>	<i>curricula</i>
	<i>bacterium</i>	<i>bacteria</i>
	<i>millenium</i>	<i>millenia</i>
	<i>ovum</i>	<i>ova</i>
	<i>symposium</i>	<i>simposia</i>

e)	<i>analysis</i>	<i>analyses</i>
	<i>thesis</i>	<i>theses</i>
	<i>axis</i>	<i>axes</i>
	<i>diagnosis</i>	<i>diagnoses</i>
	<i>ellipsis</i>	<i>ellipses</i>
f)	<i>child</i>	<i>children</i>
	<i>ox</i>	<i>oxen</i>

In the above examples we have the singular/plural forms, but the plural morpheme is not the same in each case. The first group is the regular English plural in #s. The second and forth group are Latin forms. The third group does not make any formal distinction between the singular and the plural. The fifth group is Greek in origin, while the last group is the Old English plural form. All the suffixes mean *plural* and all these idiosyncratic plurals depend on the identity of the stem to which they attach. *The important thing is that all these plurals must be learned one at a time. There is no general rule that produces these plurals and there is no semantic mnemonic to help you remember which ones apply to which.* All the plural affixes represented above –#s, #i, #es, #a, #en or nothing at all - are allomorphs of the same morpheme which stands for the feature [+plural].

In what follows we intend to draw attention to some tricky problems in connection with ‘*plural forms*’ and ‘*plural meaning*’.

3. COLLECTIVE NOUNS. DISTRIBUTIVE AND COLLECTIVE PLURALS

3.1. Collective nouns like *class*, *cattle* etc. can be defined as nouns denoting ‘a whole’, consisting of *individualizable* elements,

namely *pupils* and *cows*. Leech (1989) calls them 'group nouns'. Just like regular countables (10ii), collective nouns (10i) may occur as complements of the verb *count* as in:

- (10) (i) *I counted the people/the cattle/my class/the money/ the audience, etc.*
(ii) *I counted the pupils/the cows, the pennies/ the persons, etc.*

The list of collective nouns below reflects the most significant socio-cultural groupings of society as found in the area of *politics, trade and industry, religion, sports, etc.*

- (i) **Politics:** *assembly, airforce, cabinet, House of Commons, senate, government, party, opposition, Foreign Office minority, majority, ministry, mass, council, congress, press, jury, committee, public, people, police, proletariat, army, troop, fleet, society, squadron, etc.*
(ii) **Trade, industry:** *firm, staff, board, sales division, department, management, union, club, team, etc*
(iii) **Religion:** *congregation, clergy, parish, choir, ministry, etc.*
(iv) **Education/sports:** *class, crew, group, school, audience, etc.*
(v) **Others:** *family, proportion, crowd, mob, company, aristocracy, gang, data, nobility, media, household, flock, herd, poultry, mess, swarm, pack, flight, livestock, money, etc.*

To this list one can add the names of many organizations which also display the behaviour of *inherently collective nouns*: the NATO, the BBC, the EU, etc. though these DPs are interpreted as *singular terms*, since they refer to one unique individual.

From a semantic point of view these nouns designate sets of individual concepts. Formally, most collective nouns pass all the

tests of countability, namely they allow *countable quantifiers and determiners*, and in the sense of 'body/group', i.e. several 'bodies/groups', they allow the plural marker #s and hence plural agreement and plural anaphoric pronouns:

- (11) (i) Governments in all countries are trying to control inflation
- (ii) Several families have joined to help the people in need
- (iii) Many governments/gangs/clans will be shaken by this law

The characteristic feature of all these nouns, when they are in the *singular form*, is that they can be used with *singular or plural verbs and determiners* and *singular or plural anaphoric pronouns*. In this case we say that they have a *distributive reading*. Some of the the examples below are borrowed from Poutsma (1926:283):

- (12) (i) a) The audience, **which** was a large one, **was** in its place by 7 p.m. (+collective)
- b) The audience, **who were** all waving **their** arms above **their** hewere clearly enjoying **themselves**. (+distributive)
- (ii) a) The board **has** issued **its** new rules for the equipment of vessels at se (+colective)
- b) The board **were** sitting in solemn conclave, when Mr Bumble rushed into the room in great excitement. (+distributive)
- (iii) a) The mob **was** dispersed (+colective)
- b) The mob **are** so pleased with your honour (+distributive)
- (iv) a) The ministry **is** afraid to refuse/ (+collective)

- b) *The ministry also **were** tottering (+distributive)*
- (v)
 - a) *The firm **finds itself** in sudden and urgent need of fifty thousand dollars (+collective)*
 - b) *All the time he must have known that the firm **were** meditating (+distributive)*
- (vi)
 - a) *Her family **has disgraced itself** (+collective)*
 - b) *The family still **resolve** to hold up **their** heads. (+distributive)*
- (vii)
 - a) *I like to know what the enemy **is** thinking (+collective)*
 - b) *The enemy **were** visibly cracking (+distributive)*
- (viii)
 - a) *The BBC **is** sending him to Tuscany for the summer. (+collective)*
 - b) *The BBC **are** planning to use the new satellite next week. (+distributive)*

Inherently, nouns like the ones listed above are (syntactically) *singular nouns* in the sense of ‘*body/group*’ and, as we have seen, can combine with the relative pronouns *which/that*, *singular determiners* and *verb-agreement* and be replaced by the pronoun ‘*it*’. It is said that in such cases the DP has a ‘*collective interpretation*’. On the *collective reading* the predicate is true of the entire group ‘*en masse*’ (i.e. of the entire set). This is the case in all the (a) examples above.

Singular collective nouns can also have an interpretation when the *individuals/members* that make up the ‘*body/group*’ are intended. In this case we have a ‘*distributive interpretation*’. In this interpretation the nominal phrases in the *singular form* are interpreted as *designating the individuals* that make up the set designated by the head noun. The *plural agreement* with the verb and the *plural determiners* and *anaphoric pronouns* are triggered by the semantic feature of *distributivity* (-collective). On the *distributive interpretation* the sentences above read as: ‘*the*

predicate is true of each member (each person), of the set' (examples in (b) above).

The 'collective' or 'distributive' reading of singular collective DPs generally depends on the predicate of the sentence. Intransitive predications like: *be dispersed, be numerous, gather, outnumber, collide, be alike, be a trio*, (to mention just a few) force a *collective reading* of the inherently collective subject DPs. These predicates have a collective reading and obligatorily require *semantically non-singular subjects* (Hausser 1974). Predicates like '*be admired*' or '*be pleased*' (as in the examples above) force a '*distributive*' reading of collective noun subjects. Collective nouns in *the plural* (and as a matter of fact this is true of *all plural countable noun phrases* in subject or direct object position) also allow for a double semantic interpretation: a '*collective*' and a '*distributive*' reading. In these cases, as well, the predicate is the one that forces one of the two possible readings. Consider the examples below:

- (13) (i) *Many armies/navies are admired for their courage all over Europe. ⇒ Each army/navy is admired for its courage (+pl;-coll);*
 (ii) *The four armies/navies gathered their men to meet the enemy. (+pl,+coll);*
 (iii) *Many gangs/clans will be shaken by this law ⇒ Each gang/clan will be shaken by this law (+pl -coll);*
 (iv) *Many gangs/clans gathered in the same room (+pl +coll).*

The examples in (13i,iii) have a *distributive reading* for the *plural collective DPs*. This interpretation is required by the predicate '*be admired*'. The predicate '*be admired*' applies to *each army* or *navy* in turn (i.e. the predicate is true of each member of the set);

in (13ii,iv) we have a *collective interpretation* (i.e. the predicate is true only of the sets of groups) of the *plural collective* subject noun phrase, which is imposed by the predicate of the sentence, namely 'gather'. All plural countable nouns, as already mentioned above, display a *collective* or *distributive* reading. In the collective reading the plural NPs denote sets of individuals (or rather sets of properties of individuals) while in the distributive reading they designate, just like singular DPs individual concepts (or rather properties of individual concepts). Plural DPs are interpreted collectively only if the respective predicate allows it. As already mentioned the predicates themselves may display the feature (+coll), which means that they require *non-singular* subjects. There may be cases when a predicate may render the plural DPs as ambiguous between the two readings:

- (14) (i) *All the cars have a petrol gauge* \Rightarrow *Each car has a petrol gauge*
 (ii) *The cars collided/gathered in the parking lot.*
 (iii) *All the men lifted the piano* (Cornilescu1986:303)

In (14i) the plural DP in subject position is a *distributive plural*, since the predicate is true of each member of the set of cars while the subject of (14ii) is *collective*, since the predicate is true only of the entire set. In (14iii) the subject can be given either interpretation; the sentence may mean either: (i) Each man lifted the piano in turn; or (ii) all the men lifted the piano together.

3.2. We can also identify another group of nouns, uninflected plural nouns only, i.e. they are morphologically not marked for plural. They share with true collectives and plurals the ambiguity between the distributive reading and the collective reading and agree with plural only: e.g. *cattle, livestock, poultry, police, people*,

folk, vermin, etc. The lack of singular – plural contrast can be seen in : *These cattle belong to me* vs **This cattle belongs to me*. They are called ‘quasi-count nouns’. They cannot occur with low numerals and distinct lexical items must be used whenever individuation takes place: **four police* vs *four policemen*; **five cattle* vs. *five cows*. In general they may occur with high numerals: e.g. *two hundred police, cattle, poultry, etc.*

Folk and *people* can be used with low numerals: *these seven/five/two city folk/people*. Instead of **one people* we say *one person*. A distinction should be made between *people*₁ and *people*₂, a noun that has a regular count behaviour, displaying regular singular and plural forms: e.g. *Similar customs are found among many peoples of the world*.

3.3. There is a group of nouns in English such as *deer, sheep, swine*, etc. (see also A. Badescu, 1984:56) that have their plural form identical with the singular form (i.e. Sg = Pl).

These nouns take all the *articles* and *quantifiers* (numerals included) that characterize genuine *countables*. The plural use of these nouns is marked on the *verb, determiners* and *anaphoric pronouns* (they take plural form). The irregular behaviour of this class of nouns can be accounted for ‘diachronically’. In Old English there were several declensions for nouns according to *gender* distinctions. It was only *masculine* nouns that got the #s morpheme as a marker for the plural. Poutsma (1926:122) observes that ‘*deer, sheep, swine*’ belonged to the class of Old English *neuter nouns*, which in the nominative and accusative had the *same form* in the plural as in the singular...In Old English ‘*deer*’ meant ‘*wild animal*’ in general. In this sense we still find it once used in Shakespeare:

- (15) *But mice and rats and such small deer,
Have been Tom's food for seven year.*

A deer is a large, four-legged wild animal that eats grass and leaves.

*They saw **several deer** grazing peacefully in the distance.*

*There wasn't **a sheep** in sight / He owned **six hundred sheep**.*

*A swine is a pig. There were **several swine** in the pigsty.*

An extensive group of words that have this behaviour consists of **animal names** such as: *cod, fish, grouse, moose, reindeer, bison, halibut, mullet, salmon, shellfish, mackerel, snipe*, i.e. names of animals generally found in flocks (Schibsbye 1973:102). Sweet (1891) and Poutsma (1926) speak of 'collective singular' when they discuss these nouns. Jespersen (1911:51) remarks that "in (expressions like) 'five snipe' or 'a few antelope' we have neither a collective word or a singular, but a real (individualizing) plural though the form be identical with the singular...." (Jespersen (1911:51)). Nowadays, many of the nouns vary as to form: *antelope(s), buffalo(es), giraffe(s) herring(s) ,patridge(s), rhinoceros(es), etc.*

(16) **wild fowl:** *There **are** plover, teal and snipe swarming all around us.*

fish : ***Were** there any trout in the river?/ The trout(s) of the Carpathian brooks **are** very fine./Two white herring lay on the table/There were five fish(es) on the table.*

wild animals: *Between four and five moose are anually eaten at the fort.*

Some of these nouns such as *fish, trout, carp* (to mention the most frequent ones) take the regular plural marker #s when reference is made to *varieties/kinds*.

The *collective* use of the singular form of the nouns is found particularly in shooting jargon. Compare:

- (17) (i) *to shoot duck vs to raise ducks*
(ii) *shoot waterfowl vs keep fowls*
(iii) *catch fish/trout/mackerel*
(iv) *they hunted gazelle*
(v) *zebra are a more difficult prey.*

Names of **plants** may also be used *collectively* without a plural suffix, though they **do not** take plural agreement with the verb, determiners or pronouns (Zaandvoort 1967:101):

- (i) ***Oak** and **beech** began to take the place of **willow** and **elm***
(ii) *A rocky bluff overgrown with large **cactus**.*
(iii) *The short grass was rich with white **violet** and **snowflake** and **cyclamen**.*

To our perception the examples above qualify as mass nouns rather than collective.

B. There is a class of countable nouns that form the *plural by Ablaut* (i.e. vowel change): *man*: *men*, *foot*: *feet*, *goose*: *geese*, *mouse*: *mice*. Plural by Ablaut is accounted for on *historical grounds* as well. It is to be noted that compounds of ‘*man*’ change to ‘*men*’, as in *alderman* – *aldermen*, *fireman*-*firemen*, *postman*-*postmen* etc. In a similar way compounds of ‘*woman*’ form the plural by using ‘*women*’ as in: *horsewoman*-*horsewomen*, *charwoman*-*charwomen*.

On the other hand, Poutsma (1926) remarks that: “Anglicized foreign derivatives of -man, such as *German*, *Norman*, *Roman*, *Ottoman*, as well as proper names in -man, such as *Longman*, form the plural according to the general rule by adding the suffix #s: *Germans*, *Romans*, etc”. Other survivals from the past are a few nouns which form the plural in -en: *brother*-*brethern*, *child*-*children*, *ox*-*oxen*. ‘Brethern’ is nowadays used in religious contexts, otherwise ‘brothers’ is the normal plural of ‘brother’.

Nouns with irregular plurals also include some foreign plurals (e.g. crisis: :crises, erratum: :errata, etc.)

4. NON-SORTAL TERMS – MASS (UNCOUNTABLE) NOUNS

4.1. SEMANTIC AND SYNTACTIC CHARACTERIZATION

4.1.1. The most adequate manner of characterizing *mass terms* (which are perfect examples of *non-sortal terms*) is that of setting up a comparison with *sortal terms* (*general, countable terms*). The comparison is to be made in terms of their major distinctive characteristic, namely *individuation*. **Sortals** (i.e. countable terms) possess *in-built modes of deviding their reference*. The fact that sortals devide their reference – so that we can distinguish between *one rabbit, another rabbit*, etc. – accounts for the application of *number* to such terms. **Non-sortals** (like mass nouns) *do not devide their reference*, they are, instead, *subdivisible, additive or cumulative* in reference.

Philosophers have remarked that the purposes of *sortal designation* have been to apply *number* in a definite manner to them. Quine (1960) in his characterization of mass terms remarked that “...so called *mass terms* like ‘water’ ‘footwear’ have the semantic property of referring *cumulatively*: *any sum of parts which are water is water*....Semantically they are like *singular terms* in not *deviding their reference*, but syntactically they do not go along *singular terms* which purport to name a unique object each”.

To put it differently, from a semantic point of view *mass terms* are to be opposed to *singular terms*, on the one hand, and to *sortals* or *general terms* on the other hand.

The opposition between *mass terms* and *general terms* centers round the problem of the *division of reference*: mass terms **do not have built-in modes of reference, while general terms do**. The opposition between mass terms (*water, gold, sugar*) and singular terms (e.g. *London, the book on the table*) is established in terms of their purport to *name* or not a *unique object*: singular terms purport to name unique objects while mass terms do not. Mass terms also qualify as names but they designate a different type of entity (ontologically), namely kinds. As already mentioned, the contrast between general term, mass term and singular term lies in the *terms* and not in *the stuff* they name.

McCawley (1975)) comments that “there is clearly no difference between *noodles* and *spaghetti* that can be hold responsible for the fact that *noodles* is a plural count noun but *spaghetti* is a mass noun, nor is there any such difference between *garlic* and *onions* or between *rice* and *beans*. The same entities can be described as *footwear* or as *shoes*, as *furniture* or as *chairs*”. The lack of *in-built modes of deviding their reference* may provide an explanation for the syntactic characteristics of mass terms which can be summarized as follows:

- resistance to pluralization;
- resistance to the co-occurrence with the indefinite article;
- the combination with specific quantifiers, also called ‘*amassives*’: *much, little*, which are used with both concrete and abstract mass nouns.

(18)	(i) much/little wine	(ii) *many/few wine
	sugar	sugar
	love	love
	attention	attention
	speed	speed

Observe that mass nouns include both ‘*concrete*’ and ‘*abstract*’ nouns as is the case with countable nouns. The expression ‘mass noun’ has clearer intuitive force in the context of concrete ‘stuff’. But as we can notice from the examples above concrete mass nouns have a lot in common, semantically and syntactically, with non-concrete nouns like ‘*love*’, ‘*attention*’, ‘*speed*’ etc.

4.1.2. As we have seen with Quine (1960), it is not the *nature of the referent* which makes a *name* to be a *mass term*, a *general term* or a *singular term*, but rather the way in which *reality is viewed within each natural language*. This remark suggests that, actually, noun phrases may acquire a *mass noun* use or a *countable noun* use depending on the *context*; a *thing* name, for instance may be used to name the *material* (a *pudding* – *much pudding*) or the other way round the *material* may be transferred to the *thing* (*iron* – *an iron* or *gold* – *to count ones gold*). Actually, the first to mention the fact that hosts of nouns and noun phrases cut across the mass-count distinction was Otto Jespersen (1931). His examples include the following:

- | | | |
|------|-----------------------------------|-------------------------------------|
| (19) | <u>a tin</u> of sardines | an alloy of copper and <u>tin</u> |
| | two big <u>cheeses</u> | a little more <u>cheese</u> |
| | have you had <u>an ice</u> ? | There is <u>no ice</u> on the pond |
| | confidential <u>talks</u> | there is too <u>much talk</u> |
| | all these <u>dangers</u> are past | there is little or no <u>danger</u> |
| | a delightful <u>time</u> | I have no <u>time</u> now |

In the same vein, Quine (1960) notices that “full-fledged general terms like *apple* are also commonly made to double as mass terms. We may say ‘*put some apple in the salad*’, not meaning ‘*some apple or other*’. Likewise, we may say ‘*Mary had a little lamb*’ in either of the two senses” (Quine (1960:91)). Moreover,

Quine (1960) shows that if a mass term occurs as part of a nominal predicate, it functions as a general term: “Examples showing mass terms after ‘is’ are: ‘*that puddle is water*’, ‘*The white stuff is sugar*’, ‘*The rest of the cargo is furniture*’.... We can view the mass terms in these contexts as *general terms*, reading ‘*is water*’, ‘*is sugar*’, ‘*is furniture*’ in effect as ‘*is a bit of water*’, ‘*is a bit of sugar*’, ‘*is a batch of furniture*’. (Quine:1960:97).

Ware (1979:18) notices that the same kind of variation may occur in other circumstances as well, thus “it may be that the National Gallery in London has *many more Rembrandts* than the National Gallery of the United States, but those who are interested in expanse and expense may find out that the latter has *much more Rembrandt* than the former. This might incline us to talk about how *much David* is in the Louvre and *how many Vermeers* in the Mauritshuis.....We speak of *how much family* one has. Hunters ask if there is *much elk* in the province...”.

The difference between the pairs mentioned is not to be accounted for in terms of some *semantic idiosyncrasy*: i.e. the difference is not to be gleaned from the sense of such words as ‘*pudding, apple*’ or ‘*gold, tin, furniture*’ but from the *morphological and syntactic characteristics that these nouns evince*. As a matter of fact, in recent linguistic theory the assumption is that the meaning postulates (viewed as lexical redundancy rules) described in the following subchapter that would account for the *mass noun reading* or *count noun reading* of nominal phrases can be replaced by a structural version within the minimalist version of language theory launched by Chomsky in the 90’ies. (Borer (2003, 2004)

In what follows, we shall offer an analysis that will explain the behaviour of nouns that have a double syntactic regime. In the analysis that follows we have assumed the existence of some meaning postulates that regulate the relation between nouns that have a double syntactic regime (nouns that evince both mass and

general term behaviour). The meaning postulates may be viewed as lexical redundancy rules.

4.2. MASS NOUNS AND QUANTIFIERS.

The syntactic restrictions operating on mass terms, following from the lack of *built-in modes of deviding their reference*, can be transgressed. As already mentioned, characteristic of inherent mass nouns is a group of quantifiers which ‘individuate a certain portion’ of the intended ‘stuff’. When used with these quantifiers, *mass terms* are recategorized into *general terms*. Some of these quantifiers can be used both with abstract and with concrete mass terms (see examples in (20)), while others are restricted to concrete mass terms (examples in (21)) or non-concrete mass terms (examples in (22), respectively:

- | | | | |
|------|------------------------|--------------------------------|----------|
| (20) | a piece of | gold | honesty |
| | an amount of | butter | regret |
| | a bit of | iron | love |
| | a (little) scrap of | coffee | wisdom |
| | | meat | kindness |
| | | ice | perfidy |
| | | | justice |
| | | | Quixotry |
| (21) | a fall of snow | a reel of thread | |
| | a stack of hay | wire | |
| | a cake of soap | film | |
| | a lump of sugar | | |
| | a bar of chocolate | a clod/lump of earth, clay | |
| | a skein of wool | a grain/sheaf of wheat, barley | |
| | a roll of toilet paper | corn | |

a slice/rasher of ham, bacon

a cup of tea

milk

coffee

cocoa

a set of furniture

a glass of wine

water

beer

milk

- (22) a flutter of excitement
a pang of jealousy
a stroke of luck
an act of kindness/love/justice.

All these *amount quantifiers* operate as *partitioning expressions* of the whole QN expression designating a portion of the respective stuff. As already mentioned, the indefinite article *a(n)*, *cardinal numbers*, and the *plural marker* **do not co-occur** with *mass nouns*.

Whenever they do, they have an *individuating effect*, the respective *mass term* being recategorized as a *countable term* (MT→CT); in such cases a certain ‘portion’ of the stuff is intended. The suggestion put forward is, actually, that the respective noun phrase is elliptical, an implicit amount quantifier being assumed. Consider the examples below:

- (23) (i) *I had **two coffees** this morning/Teas, coffees and cakes are available*
(ii) *I had **a beer** for lunch*
(iii) ***The gold** was found in the next room*

Expressions like the one in (23 i,ii) are elliptical for ‘*two cups/mugs of coffee*’ and ‘*a glass/bottle of beer*’, respectively. The expression (actually the DP ‘the N’) in (23iii) is elliptical for ‘*the*

quantity/amount of gold' and qualifies as a *singular term*, since a *unique portion* of the stuff is *individuated*. The *mass term* as such is interpreted as recategorized into a *general term*. Ware (1979) remarks the following: 'the definite article was said to be appropriate only to count nouns and not to mass nouns. This would give a certain unity to the articles (definite and indefinite), and it could perhaps explain some matters about individuation. On the other hand, it would appear to give all nouns a count occurrence. For any *stuff* on the table we can speak of *the stuff* on the table. Whether it be *sugar, water, dust* or whatever. And we can always speak of *the stuff* here and there.'

The determiners *this/that* accompanying mass terms have the same individuating effect, i.e. expressions like the ones in (12) are used whenever a certain 'portion' of the stuff is intended. Just like in the case of '*the N*', noun phrases built of *this/that* and *mass noun* qualify as *singular terms*:

- (24) (i) ***Butter*** is healthy
 (ii) ***This butter*** is stale***Gold*** is a precious metal
 (iii) ***That gold*** was found in the other room

The individualizing quantifiers *each, every, another* are characteristic of *general terms* since they require criteria of distinctness and individuation. When they occur with mass nouns the expressions are elliptical (i.e. an individualizing expression is assumed) and we are dealing again with a case of recategorization from mass terms into count terms.

5. THE MASS TERM – COUNT TERM shift

In what follows we shall try to point out the different relations that may possibly hold between *mass terms* and the *count terms*

that represent recategorizations of the former by means of *pluralization* and/or the *indefinite article*. The analysis assumes the existence of *lexical redundancy rules* between the nouns that allow a *double syntactic regime*; the lexical redundancy rule describes the phonological, syntactic and semantic relation existent between the two nouns. In order to identify the recategorization cases we have used the definitions supplied by highly reliable and comprehensive dictionaries (Longman, 1991 and Oxford, 1995). The frame within which the analysis is based is the one suggested by Carlson (1979) by the distinction he makes between *objects*, *kinds* and *stages*. As already mentioned, the sub-domains of *objects* and *kinds* are regarded as constituted of *individuals*, while *stages* are regarded as entities but not as individuals as such. *Stages* are characterized as being time-space slices of individuals. The present analysis heavily relies on a MA dissertation by Dana Isac.

A. The first case of recategorization includes the mapping of *mass terms* the reference of which we shall conventionally call **A** into *count terms* which denote **kinds of A**. Examples of such mass terms which undergo a shift from **A** (a kind-level individual) to **kinds of A** are given below:

- (25) wine, tea, food, fruit, meat, metal, steel, grass, gas, coffee, experience, fashion, intercession, etc. Compare the examples in (26):
- (26) (i) **Wine** is healthy if you drink **it** in small quantities
 (ii) **Many different wines** grow in Spain (iii) **Bordeaux is a French wine**
 (iii) **Four wines** were served at dinner. **They** were dry wines.
 (iv) **Is it made of wood or metal?**
 (v) **He is a good worker in metals.**

The noun *wine* in (26i) is a regular *mass noun*, hence names a *kind-level individual* in Carlson's terms. Semantically it does not divide its reference, instead its reference is *cumulative and subdivisible*: any sum of parts which are *wine* is *wine*.

The semantic properties are reflected in the syntactic behaviour. Syntactically, the noun triggers *singular agreement* with the *verb* and *singular anaphoric* pronouns. In (13ii) the expression: '*many different wines*' is elliptical for '*many different kinds of wine*', qualifying as a *general term*, semantically, and syntactically. In this case the reference of the mass term '*wine*' is considered to be partitioned into '*kinds*' according to some special properties.

These special properties (colour, flavour, etc.) provide different partitions with criteria of distinctness implicitly contained in *kind of wine*. Hence, *any kind of wine is wine and any quantity of wine is part of a kind of wine*. Syntactically, as we can see from the examples (26ii) and (26iii) the plural general term '*wines*' has *count* properties: *plural agreement* with the verb and *plural anaphoric* pronouns; *count quantifiers*; *collocation with cardinals*.

It is to be noticed that proper names like *Murfatlar*, *Cotesti*, *Bordeaux*, *Malaga*, etc. represent lexicalizations of 'kinds' of wine. Syntactically and semantically these 'names' function as *mass terms* (hence, designate kind-level individuals in Carlson's theory):

(11) He drank too *much Bordeaux*; it went straight to his head.

B. The second case of recategorization of *mass terms* into *count terms* refers to mass terms the reference of which will be conventionally called A and maps them into count terms expressing **an act / an instance/an occasion or occurrence of A**, i.e. an act/instance/occasion/occurrence_which has *the quality* expressed by A. The multiplicity of possible translations of mass terms falling under this case of recategorization may be given a unified analysis

by considering all the derived count terms as *stages of the kind* which is the reference of the mass term in question. All these recategorized count terms denote *spatio-temporal slices* of the kind denoted by the respective mass term.

This case of recategorization is fairly well represented as can be seen from the examples below:

- (27) attention, affection, confidence, decency, idiocy, feeling, ignominy, immorality, immersion, implication, imposture, kindness, law, mentality, regard, respect, etc.

Consider the examples below:

- (28) (i) *decency*_{MT} 'conformity to the prevailing standard of behaviour, speech, etc.
'*decencies*_{CT} 'the standards of behaviour considered correct by society'

His behaviour was an offence against decency
You must observe the decencies.

- (ii) *attention*_{MT} 'a certain mental activity which consists in directing one's thoughts on something'
*attentions*_{CT} 'an act of courtesy or gallantry'

He shouted in order to attract attention
They showed the old lady many little attentions

- (iii) *law*_{MT} 'the whole body of rules that governs the behaviour of the members of a society'
*law*_{CT} 'a general principle, a rule, or set of rules'

His word is law

to pass a law/ a law of etiquette/the laws of physics

- (iv) *regard*_{MT} 'esteem, affection, or respect'
*regards*_{CT} 'good wishes or greetings'

I have no regard for her.

Listen, give her my regards, will you?

In (28iii) *law* is an abstract mass term which has all the syntactic properties of mass terms and denotes '*the whole body of rules supported by the power of government and that governs the behaviour of members of a society*' (Longman). The noun phrase *a law*, on the other hand refers to only one slice of this whole body of rules, to only one instantiation which realizes the kind law, namely '*a rule*' (Longman).

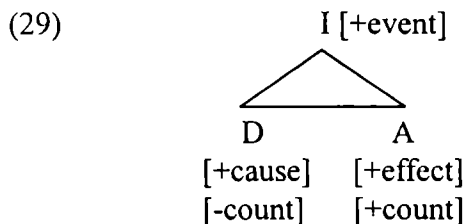
Consider also the example in (28ii). In (28ii) *attention* is an abstract mass noun that refers to '*a certain mental activity which consists in directing one's thoughts to something*'. *Attentions* means '*an act of courtesy or gallantry indicating affection or love*'. The noun *attentions* is an abstract count noun and its relation with *attention* is a relation of presupposition: to *show attentions* to someone presupposes to *pay attention* to that person.

C. The third case of recategorization of mass terms into count terms covers the case of mass terms denoting **A** which are recategorized into count terms expressing something '**related to A**'. The multiplicity of possible translations of mass terms falling under this case of recategorization may be given a unified analysis by considering all the derived count terms as *objects of the kind* which is the reference of the mass term in question, that is to say, all these recategorized count terms denote *object-level entities* of the *kind-level entity* denoted by the respective mass term.

The shifts from *uncountability* to *countability* presented in (A) and (B) above are to be, more or less, considered as cases of ‘**synecdoche**’ (i.e. a part is substituted for a whole or a whole for the part, that is to say, the transfer is quantitative). The shifts presented under (C) are cases of ‘**metonymy**’ (i.e. the substitution of a word referring to an ‘attribute’ for the thing that is meant, that is to say, the transfer is logical).

In the case of *metonymic shifts* the *departure* and *arrival* terms are related by means of an all-encompassing term, an intermediary term which has three possible hypostases: [+event], [+process/action], [+state]. These three intermediary terms are employed to account for the shifts under consideration. The entity [event] implies *change*, and *result*, the entity [process or action] is characterized by the fact that it may have *agents* or *instruments* as subjects, while [states] never allow agents/instruments as subjects and generally refer to a *quality*, a *property*. Each metonymic type can be graphically represented as a triangle having the departure, the arrival and the intermediary terms in its angles.

1) **The metonymy of the cause** indicates a shift from a (mass) term marked [+cause/action] to a (count) term marked [+effect/result]; the intermediary term that makes the shift possible is an [event], since ‘event’ implies *change*, and change presupposes a *cause* (or action) and an *effect* (or result). The diagram of the metonymic shift of the type ‘**cause for effect**’ is represented as a triangle dominated by the intermediary term ‘event’.



Within the metonymy of cause we can identify several sub-cases: *the action for product* shift (conventionally marked (a) in the examples below), *the action for instrument* shift (marked (b)) and *the action for place* shift (marked (c)):

- (30) *coalition*_{MT}: 'the act of joining' (act)
*coalition*_{CT}: 'a union of forces' (result)
*aquatint*_{MT}: 'process of engraving on copper...' (act)
*aquatint*_{CT}: 'picture made in this way' (result/product)
*association*_{MT}: 'the act of associating' (act)
*association*_{CT}: 'group of people having a common purpose' (result)

I greatly benefited from my association with him
He's a member of the Automobile Association

- confederation*_{MT}: 'the act of uniting/joining' (act)
*confederation*_{CT}: 'an alliance of political units' (result)
*publication*_{MT}: 'act of publishing' (act)
*publication*_{CT}: 'something published' (result/product)

The book is ready for publication
The library gets the usual monthly publications

- translation*_{MT}: 'the act of translating'
*translation*_{CT}: 'something that has been translated'

Translation of old parchments always causes problems
All those translations were anonymous.

- application*_{MT}: 'the act of asking for something' (act)
*application*_{CT}: 'a written request for something' (means/instrument)

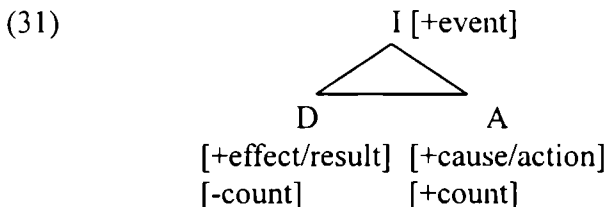
- conveyance*_{MT}: 'the act of conveying/transporting' (act)
*conveyance*_{CT}: 'a means of transport' (means/instrument)

*business*_{MT}: ‘commercial activity, dealings’ (action)
*business*_{CT}: ‘commercial or industrial establishment’
 (place)

We do not do much business with them

He's got a profitable business as a greengrocer

2) **The metonymy of the effect.** This metonymic relation is of the type ‘**effect for cause**’ and is the reverse of the ‘metonymy of the cause’ illustrated above. As in the previous case the relation is dominated by the intermediary term ‘event’, since ‘event’ presupposes change. The metonymic relation can be represented graphically as in (26) below



Examples of the ‘**effect for cause**’ shift are given below. As in the previous cases the departure terms are mass terms, hence [-count] and the arrival terms represent the [+count] occurrences of the corresponding mass terms.

(32) *abomination*_{MT}: ‘great hatred and disgust’
*abomination*_{CT}: ‘something deeply offensive or hateful’

....Their abomination of centralized power

That new concrete building is an abomination

For many the death penalty is a moral abomination

*abhorrence*_{MT}: ‘extreme loathing or aversion’

*abhorrence*_{CT}: ‘thing or person that is loathsome’

*affliction*_{MT}: 'great distress and suffering'
*affliction*_{CT}: 'something that causes physical or mental suffering'

*amusement*_{MT}: 'act of amusing or state of being amused'
*amusement*_{CT}: 'something that amuses'

Amusement at the mistakes of another is a sign of weak character.

I tried to teach her tennis so we would have more amusements in common/They found a dozen coin-in-the-slot amusements.

*annoyance*_{MT}: 'irritation, displeasure'
*annoyance*_{CT}: 'thing or person that annoys'

*Annoyance at ones neighbour should be avoided.
The broken air conditioner was at best a minor annoyance.*

*danger*_{MT}: 'state of being vulnerable to injury, loss or evil'
*danger*_{CT}: 'something that may cause injury, pain, death.'

*Is there any danger of fire?
The wreck is a danger to shipping*

*delight*_{MT}: 'extreme pleasure'
*delight*_{CT}: 'something that causes this'

*The wonderful performance filled the audience with sheer delight.
The delights and mysteries of Thailand bring in lots of tourists.*

*disappointment*_{MT}: 'failure to meet expectations, hope'
*disappointment*_{CT}: 'something that causes this'

After the exam the teacher expressed disappointment at the students' performance.

Failing to win the World Cup was a bitter disappointment to the team.

embarrassment_{MT}: 'a feeling of confusion, self-consciousness; disconcertion'

embarrassment_{CT}: 'something that causes this'

Embarrassment can be defined as a feeling of disconcertion. After Stalin's death 'Stalinism' became something of an embarrassment to Russian communists.

injury_{MT}: 'physical/moral damage or harm'

injury_{CT}: 'something that may hurt or harm'

If you knock a man down with your car, and then call him a fool, you are adding insult to injury.

This attack was a severe injury to his reputation.

roast_{MT}: 'joint or roasted meat'

roast_{CT}: 'operation/action of roasting'

They had cold roast for dinner.

Give it a good roast, please.

reproach_{MT}: 'state of disgrace or shame'

reproach_{CT}: 'something that brings disgrace or discredit to'

His behaviour brought reproach upon himself.

These slums are a reproach to the city council.

scorn_{MT}: 'contempt for a person or thing'

scorn_{CT}: 'an object of contempt or derision'

He was filled with scorn for their proposal

He was the scorn of the village

worry_{MT}: 'the condition/state of being troubled'

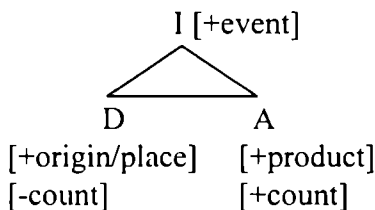
worry_{CT}: 'something that causes worry/ trouble'

He was showing signs of worry

What a worry that child is!//Domestic worries have made him look old.

3) **The metonymy of the place (origin).** This type of metonymic relation is characterized by the fact that the name of the entity denoted by the *mass term* (labelled **place/origin**) is taken by the *thing* coming from it, the **product**. The intermediary term is again marked [+event] (since events presuppose change at a given point in time and place) and the diagram of this metonymic shift applied to mass terms is again a triangle:

(33)



Examples of this kind of shift, which accompanies the mass term – count term recategorization are given below:

(34) *antiquity*_{MT}: ‘the far distant past/the quality of being ancient’

*antiquities*_{CT}: ‘(pl) remains or relics, objects such as statues, buildings, coins that date from ancient times’

This is a vase of great antiquity.

At the British Museum there are plenty of Greek and Roman antiquities.

*coal*_{MT}: ‘a compact black carbonaceous rock’

*coal*_{CT}: ‘a fuel’

Coal is getting cheaper these days.

A few coals were still glowing.

crystal_{MT}: 'a solid, transparent mineral, such as quartz'

crystal_{CT}: 'a piece, an object of this shaped into an ornament'

This chandelier is made of crystal.

The crystals on the mantelpiece sparkled in the light.

iron_{MT}: 'a malleable silvery-white metallic element'

iron_{CT}: 'any tool or implements made of this'

The railings are made of iron.

An iron is an appliance for pressing fabrics

nylon_{MTA}: 'a class of synthetic polyamide materials'

nylon(s)_{CT}: 'cloth or yarn made of this, stockings'

This dress is made of nylon

She bought several nylons

paper_{MT}: 'a substance made of cellulose fibres'

paper(s)_{CT}: 'a single piece of such material, esp. if printed or written'

She brought a parcel wrapped in brown paper

Do not mix your notes with the state papers (documents)/

Give me, please, today's paper (newspaper).

rubber_{MT}: 'elastic material obtained from certain plants'

rubber(s)_{CT}: 'something made of rubber'

The rubber plantations of Malaysia are extremely productive.

She forgot her rubbers (waterproof overshoe) at home.

I bought a pencil with a rubber (eraser) at the end.

*tin*_{MT}: 'soft silvery-white metallic element'

*tin*_{CT}: 'any container made of mettalic tin'

Tin is widely used in alloys, esp. bronze and pewter.

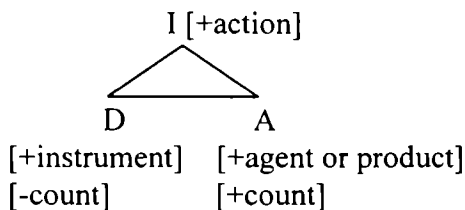
She bought ten tins of oil./Do you want a tin of beer?

*wool*_{MT}: 'the outer coat of sheep,yaks, etc'

*wool*_{CT}: 'yarn, cloth or a garment made from this'

4) **The metonymy of the instrument.** This particular metonymic relation between mass terms and the recategorized count terms can have two variants: a) **instrument for agent** and b) **instrument for product**. The intermediary term is marked in this case [+action]. The diagram representing this type of shift is given below:

(35)



It is the '**instrument for product**' variant that is more productive with mass terms as departure terms. Examples of this type of shift are given below:

(36) *chronology*_{MT}: 'the science of measuring time and fixing events'

*chronology*_{CT}: 'a table of events arranged in order of occurrence'

*compromise*_{MT}: 'means of settling a dispute by concessions on all sides'

*compromise*_{CT}: 'an agreement reached in this way'

*fate*_{MT}: ‘the ultimate power that predetermines the course of events’

*fate*_{CT}: ‘the end or final result’

He had hoped to succeed to his father's estate but fate decided otherwise.

They met their various fates.

The ‘**instrument for agent**’ type of shift is not so well represented but this is only because there are other productive means of deriving the ‘*agent*’ by means of affixation. Here is a couple of examples that illustrate this type of metonymic relation between mass terms and the corresponding recategorized count terms:

(37) *justice*_{MT}: ‘the administration of law according to prescribed and accepted principles’

*justice*_{CT}: ‘a person appointed to administer justice’

The criminal was brought to justice

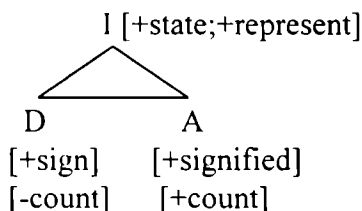
A magistrate is a justice of the peace

*justitiary*_{MT}: ‘of or relating to the administration of justice’

*justitiary*_{CT}: ‘an officer or administrator of justice’

5) **The metonymy of the sign.** This type of metonymic shift also has two variants: ‘**sign for signified**’ and ‘**signified for sign**’. The intermediary term that encompasses both terms – the departure and the arrival terms – is marked [+state, +represent]. The diagram expressing the ‘sign for signified’ is given in (38) below. The relationship between the departure and arrival terms is the result of a constant association based on physical contiguity (neighbourhood). The sign does not resemble the signified in any observable way, it merely serves to indicate it. Examples of the ‘**sign for signified**’ type of shift are given below.

(38)



- (39) *sand*_{MT}: 'finely crushed rock or quartz'
*sands*_{CT}: 'grains of sandline material in an hourglass used to tell the time'

Smooth the surface with sandpaper or sand.

The sands are running out. ('there is not much time left before the end')

*blood*_{MT}: 'a reddish fluid that is pumped by the heart through arteries and veins'

*blood*_{CT}: 'family, descent'

I have never seen so much blood.

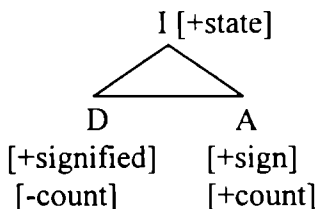
He is a prince of the blood ('of royal or noble descent')

*brain*_{MT}: 'the soft convoluted mass of nervous tissue within the skull'

*brain(s)*_{CT}: '(pl) intellectual ability'

With the second variant of the '**metonymy of the sign**', it is the entity **signified** that lends its name to **the sign**. The intermediary term allowing the shift is again marked [+state;+represent]:

(40)



Examples of the ‘signified for sign’ type of metonymic shift are given below:

(41) *augury*_{MT}: ‘the art or practice of foretelling the future by signs’

*augury*_{CT}: ‘a sign or omen’

*honour*_{MT}: ‘great respect, esteem’

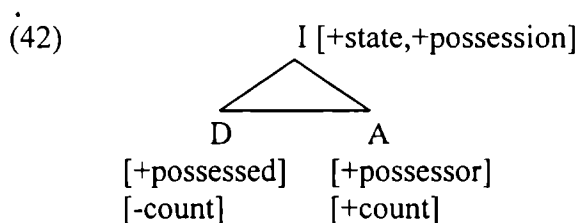
*honour(s)*_{CT}: ‘marks of respect, esteem, distinction’

In honour of his friend he organized a celebration.

It is an honour to serve you.

Military honours are ceremonies performed by troops in honour of royalty.

6) **The metonymy of the possessor.** The type of metonymic shift to be found with mass terms as departure terms is characterized by the fact that the ‘**thing (or rather property) possessed**’ lends its name to the **thing (person) possessing** it. The ‘**thing possessed for possessor**’ type of shift is controlled by the intermediary term marked [+state; +possession]. The diagram illustrating the shift under consideration is given below:



We give below some examples to illustrate the metonymic shift mentioned above:

(43) *beauty*_{MT}: ‘all those qualities that give pleasure to the mind, eye’

*beauty*_{CT}: ‘a beautiful thing’

Beauty is only skin deep.

Isn't she a beauty!

*character*_{MT}: 'the combination of traits and qualities distinguishing the individual nature of a person or thing'

*character*_{CT}: 'an outstanding person'

John is a man of character

Churchill is one of the great characters of the century.

*curiosity*_{MT}: 'the quality of being fascinating; strangeness'

*curiosity*_{CT} (also *curio*): 'something strange or fascinating'

*confidence*_{MT}: 'trust'

*confidence(s)*_{CT}: 'something confided, a secret'

She showed much confidence in life.

The two girls were exchanging confidences.

*genius*_{MT}: 'great and exceptional capacity of the mind or imagination'

*genius*_{CT}: 'person having this capacity'

Shakespeare was a man of genius

Hitler is considered an evil genius

*love*_{MT}: 'wholehearted feeling of affection and attachment to someone or something'

*love*_{CT}: 'a beloved person or thing'

I wouldn't eat a snail for love or money

You'd make a better adjusted actor if I hadn't thrown in the Upanishads and all my other loves when you were small.

*novelty*_{MT}: 'the quality of being new and interesting'

*novelty*_{CT}: '(pl) a small usually cheap new ornament or trinket'

Concluding our discussion on the recategorization of mass terms (uncountables) as general (countable) terms, we should point out that the three main cases of recategorization – MT→CT – are productive, some of them even very productive, and that they cover all the possible cases of shifting the ontological level of an entity denoted by a mass term, which are kind-level entities in Carlson's ontology.

6. GENERAL TERMS AND THEIR MASS OCCURRENCES

As already mentioned, Quine (1960) notices that “full-fledged general terms like *apple* are also commonly made to double as mass terms. We may say ‘*put some apple in the salad*’, not meaning ‘*some apple or other*’ Likewise, we may say ‘*Mary had a little lamb*’ in either of the two senses’ (Quine (1960:91)). This remark suggests that actually inherently *countable nouns* may acquire a *mass noun* use depending on the **context**.

As we have seen in the case of the recategorization of mass terms into countable terms, the *material* may be transferred to *the thing* (*iron – an iron or gold – to count ones gold*). The other way round, a *thing* name, may be used to name the *material* (*a pudding – much pudding, an apple – much apple*). Actually, as already mentioned, the first to mention the fact that hosts of nouns and noun phrases cut across the mass-count distinction was Otto Jespersen (1931).

It is a well-known peculiarity of English that several general terms have lexicalized forms for the corresponding mass occurrences: this is the particular case of general terms that name *animals*; the meat of the respective animal is designated by a lexical

item which is semantically and syntactically a mass term. Consider the examples below:

- (44)
- | | | |
|--------------|----|----------------|
| <i>pig</i> | -- | <i>pork</i> |
| <i>sheep</i> | | <i>mutton</i> |
| <i>calf</i> | | <i>veal</i> |
| <i>deer</i> | – | <i>venison</i> |
| <i>cow</i> | – | <i>beef</i> |
- This pig is very fat*
I have bought some pork for dinner
There are two sheep in the field.
I like mutton

Nevertheless, the overwhelming majority of general terms have no corresponding mass lexicalizations, the same name acquiring a mass noun use, contextually. In the majority of cases the 'thing' name (general term/countable) is transferred to name the 'material' (mass term). We list below several examples of general terms that may double as mass terms:

- (45)
- | | |
|----|--|
| a) | <i>He shot <u>five snipe</u> this morning</i> |
| b) | <i>She got up early and cooked <u>snipe</u> for her guests' breakfast.</i> |
| a) | <i>We saw <u>several ducks</u> on the Serpentine.</i> |
| b) | <i>'Duck allaronge' is a piece of burnt <u>duck</u> covered with mandarin segments and sugar in the gravy.</i> |
| a) | <i>Would you like <u>an apple</u>?</i> |
| b) | <i>There is <u>too much apple</u> in this salad.</i> |
| a) | <i>There are <u>two old oaks</u> in the garden.</i> |
| b) | <i>This furniture is made of <u>oak</u>.</i> |
| a) | <i>The baby has <u>two teeth</u> already.</i> |
| b) | <i>There's too <u>much tooth</u> about her.</i> |

We may conclude the presentation on the recategorization of mass terms and general terms by repeating the following quotation from Ware (1979) who notices that the same kind of variation may occur in other circumstances as well, such as proper names, thus “it may be that the National Gallery in London has many more Rembrandts than the National Gallery of the United States, but those who are interested in expanse and expense may find out that the latter has much more Rembrandt than the former. This might incline us to talk about how much David is in the Louvre and how many Vermeers in the Mauritshuis.....We speak of how much family one has. Hunters ask if there is much elk in the province...” (Ware (1979:18))

The above quotation actually supports Quine’s (1960) remark “ that it is not the nature of the referent which makes a name to be a mass term, a general term or a singular term, but rather the way in which reality is viewed and ordered within each natural language’. In this sense, then, mass noun use implies neither existential commitment nor criteria of distinctness; the referent of a mass noun is non particular even if concrete.

7. PLURALE TANTUM NOUNS

The term ‘plurale tantum’ is Latin in origin and is the singular of ‘pluralia tantum’, which would roughly be translated as *plural-only*. It is used by most grammarians to refer to nouns of which the plural form is *the only or usual form*. According partly to their meaning, partly to their origin, the plurale tantum nouns have been divided into certain groups that designate (i) *illnesses*, (ii) *names of sciences*, (iii) *names of games*, (iv) *instruments*, (v) *clothing objects*, (vi) *parts of the body*, as well as other nouns that do not belong to the above mentioned classes.

The class of *plurale tantum* nouns has always been regarded by a majority of traditional grammarians as a *homogeneous* class. As we shall see, the nouns labelled 'pluralia tantum' are definitely *non-homogenous* with respect to the distinction we have made between **non-sortals** (that evince mass noun properties) and **sortals** (that evince count noun properties). Actually, the class of *plurale tantum* nouns can be divided into two subclasses: (i) nouns that display mass noun characteristics (but for the presence of the plural marker #s on the noun); (ii) nouns that qualify as sortals, showing the characteristics of general/countable terms. The classification and some of the examples that follow each set of nouns are borrowed from I. Stefanescu (1988).

A) *Names of certain physical and mental illnesses/derangements* such as: *creeps, dismals, dumps, fidgets, glanders (rapciuga), gripes (colic), horrors, hysterics, jerks, jumps, measles, mumps, pathetics, pouts, rickets, shakes, shivers, shingles, sullens, staggers, sulks, tantrums, thrills, vapours*, etc. appear to have the properties of mass nouns, except for the presence of the plural markers #s on the nouns. Consider the following examples:

- (46) *Tea time and Miss Pross making tea, with another fit of the jerks upon her. Measles is a disease which when it occurs in healthy children, is attended by only an insignificant mortality.*
Mumps is contagious.
Shingles has severe complications.
Glanders has broken out in the American mules remount-farm at Stellenbosch.
The whole of her first year was one continual series of sulks, quarrels and revolts.

We can speak a little to it, being ourselves a little recovered, – we whisper it in confidence, coming – out of a long and desperate fit of the sullens.

What business have you to indulge in (a fit of) the dismals?

From the examples above it appears that the nouns in this group have the syntactic properties of mass nouns:

- they trigger singular agreement with the verb and singular anaphoric pronouns, e.g. *Mumps is a disease; it is infectious.*
- the indefinite article or cardinal quantifiers can not occur with these nouns.
- individuation is possible by means of the following type of individuating expressions: *a series of, a fit of*: e.g. *a fit of the dismals/sullens, a series of sulks.*

B) Nouns that name certain games: *billiards, bowls, checkers, darts, dominoes, draughts, forfeits, marbles, ninepins, skittles*, etc. These nouns also have mass noun behaviour except for the presence of the *plural marker*. Consider the following examples:

(47) *Billiards is played in England on an oblong table, thirteen feet long by six feet broad.*

Ninepins requires great skill.

Draughts is an entertaining game.

Forfeits is banned in this country.

Marbles is a game similar to bowls.

Skittles is a bowling game in which players knock over as many skittles as possible by rolling a wooden ball at them.

Darts is not really a sport.

As in the previous case, this subgroup of nouns display *mass noun* properties:

- trigger singular agreement with the verb and singular anaphoric pronouns
- they do not occur with the indefinite article, count quantifiers or numerals
- individuation is possible by means of individuating expressions like: *a game of, a round of*.

Remark: ‘*Skittles*’, ‘*ninepins*’, ‘*draughts*’ ‘*dominoes*’, may also contextually recategorize as *countable nouns* and occur in the *singular* form, i.e. ‘*ninepin*’, and ‘*skittle*’ or ‘*draught*’ and ‘*dominoe*’ but in this case designation to the *pieces* is intended, e.g. ‘*He sets up his four ninepins*’, ‘*In this game you must knock over as many skittles as possible*’ (the bottle shaped pieces). In the case of ‘*draught*’ reference is made to the ‘*chess move*’ as such.

C) Nouns that name sciences/sports such as: *aesthetics, acoustics, athletics, dialectics, dynamics, economics, ethics, gymnastics, linguistics, mathematics, mechanics, metaphysics, optics, physics, phonetics, polemics, politics, statistics, tactics*, etc. These nouns are inherently *mass nouns*, since as the examples below illustrate they conform to the properties of mass terms: (i) *singular agreement with verbs* and (ii) *singular anaphoric pronouns*, (iii) *no articles or cardinal quantifiers*.

(48) *Acoustics is the science of sounds.*

Athletics is now the sole province of the black community, who in the days of the empire were so used to running from place to place with messages in cleft sticks.

To Spencer ethics was the crown of all human thought.

Mathematics is the science of quantities; its students are mathematicians.

All parts of knowledge have their origin in metaphysics, and finally, perhaps, revolve into it.

Phonetics is the science of speech sounds. / Politics is a game.

What is interesting about these nouns is that some of them may occur with the verb in the *plural*, as well as with *plural determiners* and *anaphoric pronouns*; hence they are contextually recategorized into *general terms*. We suggest that in this case we find again a case of metonymic shift of the type ‘*the instrument for product shift*’. Examples are given below:

- (49) *acoustics*_{MT}: ‘the study of sounds and sound waves’
*acoustics*_{CT}: ‘the characteristics of a room, auditorium, that determine the fidelity with which sound can be heard within it’

The acoustics of this hall are very good.

*economics*_{MT}: ‘the social science concerned with the production and consumption of goods, etc’

*economics*_{CT}: ‘financial aspects’

He really understood economics – in fact he had invented them.

*gymnastics*_{MT}: ‘practice and training that develop physical and mental agility’

*gymnastics*_{CT}: ‘gymnastic exercises’

Through the miscellaneous activities of his life, he gains a better balance of physical powers than gymnastics ever give.

*ethics*_{MT}: ‘the philosophical study of human conduct’

*ethics*_{CT}: ‘a code of behaviour and the moral fitness of a decision, course of action’

Such, it appears to me, are the ethics of the play.

*mathematics*_{MT}: a group of related sciences including algebra geometry, and calculus, concerned with the study of number, quantity, shape etc.

*mathematics*_{CT}: 'mathematical operations and processes involved in the solution of a problem or study'.

Do mathematics make one's manners masculine? – Well they have not done so in your case. But still they are not womanly pursuits.

It was those infernal mathematics, which I have always neglected.

*politics*_{MT}: 'the art and science of directing states and political units'

*politics*_{CT}: 'political activities concerned with the acquisition of power'

Company politics are frequently vicious.

*statistics*_{MT}: 'a science concerned with the collection, classification and interpretation of quantitative data'

*statistics*_{CT}: 'the quantitative data themselves'

Accurate statistics may be difficult to obtain, but they are the only basis on which the work of dealing with disease must rest.

*tactics*_{MT}: 'the art and science of the direction and control of forces to achieve an aim or task'

*tactics*_{CT}: 'plans followed to achieve an aim'

The Boer tactics were admirable

President Roosevelt has shown himself fully aware of these insidious tactics.

As we can notice the first three subgroups of nouns labelled 'Plurale Tantum' display *mass noun* properties. Syntactically they co-occur with *singular verbs* and *singular anaphoric pronouns*; semantically they do not divide their reference. The third group, nouns that designate *sciences*, may undergo a shift from mass term to countable term, which we suggested could be interpreted to be of the type '*instrument for product*' shift.

To these three subclasses we could add the noun 'news' which although plural in form, does not trigger plural agreement with the verb or anaphoric pronouns, (e.g. *No news is good news*). As in the case of the first two subgroups which qualify as mass terms, individuation is obtained by means of quantifier phrases: *a piece/ an item/a bit of news*.

In what follows we shall deal with three more subgroups that could be included under the heading 'plurale tantum', although some grammars view the nouns included here as examples of '*binary nouns*' or '*summation plurals*' simply because they designate something (either *a tool*, *an instrument* or *an article of dress*) consisting of *two equal parts* joined together. As we shall see from the examples below the three subgroups display *countable noun* properties and semantically they divide their reference, qualifying as *general terms*, i.e. *sortals*.

D) Nouns that designate instruments such as: *bellows, binoculars, chains, compasses, fetters, forceps, glasses, irons, manacles, nippers, nutcrackers, pliers, scales, scissors, secateurs, shackles, shears, snuffers, spectacles, stocks, trammels, tongs, tweezers*, etc. All these nouns have count behaviour, i.e. they trigger *plural agreement* with the verb, *plural anaphoric pronouns*, and *plural determiners*. Individuation is possible by means of the individuating expression *a pair of*. A few of these nouns are also found with the plural used as a singular: *a bellows/a man produced a scissors and stabbed him repeatedly*

- (50) *Tom saw her go at once to a drawer, from which she took out a pair of scissors.*
On the whole it appears that the spectacles plainly were made for the Nose and the nose was plainly intended for them.
He had a large pair of bellows with a long slender nozzle of ivory. Where are the nippers?
Secateurs are small shears for pruning.
The tweezers are used for handling small objects or plucking hairs.
Fix one point of a pair of compasses at B and with the distance BO sweep a circle.

E) Nouns that designate some articles of dress, such as: *bloomers, braces, breeches, clothes (also Brit. short for bedclothes) drawers, galligaskins, jeans, knee-shorts, knickerbockers (or knickers), overalls, pantaloons, pants, panties, pumps, pyjamas, shorts, suspenders, tails (inf. for tail coat), tights, trousers, trunks, etc.* These nouns evince *countable* properties and, just like in the previous case, individuation is achieved by the individuating expression *a pair of*; hence they qualify as *general terms*. Consider the examples below:

- (51) *These trousers are too long for you. They should be taken to the tailor's.*
He played some part in blue silk knee-shorts.
He was dressed in a tarnished green travelling jacket and a pair of overalls, with buttons from the hips to the ankle.
Those pants have a big patch on them.
Equally humorous and agreeable was the appearance of Mr Snodgrass, in blue satin trunks.
Harry Stow-Crat wouldn't resort to the stretch nylon breeches which are worn by Mr Nouveau-Richards.

Georgie has bought a pair of rubber boots so well made as to be indistinguishable from leather ones.

Remark: Whenever the nouns under D and E occur in *attributive* position or in *compounds* the singular form is used (e.g. *a spectacle case, a pyjama-cord, a suspender belt, a trouser leg*, etc)F) **Nouns that name parts of the body which are made up of parts** such as: *bowels, entrails, guts, lungs, innards, loins, whiskers*, etc. These nouns also display *countable* properties, qualifying as *general terms*, as the examples below illustrate. It is to be noticed that when reference is made to one of the two parts that make up the respective body part, some of these nouns also have a *singular* form, so they qualify as well-behaved *general terms* (e.g. *lung-lungs, whisker-whiskers, gum-gums, tit-tits, buttock-buttocks, eyelash-eyelashes*, etc).

(52) *Scrooge had often heard it said that Marley had no bowels, but he had never believed it until now.*

The gums extend from the teeth-rim to the arch-rim. In Britain we are girding up our loins for a war with the Lords. The lungs, or as they are vulgarly called lights, are eaten as parts of the pluck or fry.

To the six subgroups of nouns labelled '*plurale tantum*' grammarians also add some other nouns that seem to evince a coherent syntactic behaviour but do not appear to form a coherent group from a semantic point of view. One such group includes nouns such as : *dregs, grits, grounds, lees*. The characteristic feature of these nouns is that they trigger *plural agreement* with the verb but it appears that semantically they *do not divide their reference*: *any sum of parts of the stuff is the stuff*:

- (53) *The dregs of the battle, however brilliant, are ever a base residue of rapine, cruelty and drunken plunder.
And no sooner have you passed the straps over your shoulder than the lees of sleep are clear from you.*

Nouns like *amends*, *annals*, *assizes*, *auspices*, *hustings* are *plural-only* nouns both in form and syntactically, hence they trigger *plural agreement* with the verb and *plural anaphoric pronouns*. These nouns are regular *general terms* except for the lack of the *singular* form, which could be accounted for diachronically, I assume, since all these nouns appear to have a Latin, Celtic, Old French or Old Norse origin.

- (54) *The annals were lost for ever
Assizes were held periodically in every English county
Favourable auspices were seen in the king's visit to the county. The hustings for the new parliamentary elections were in progress*

An interesting group of nouns often included in the class of 'plurale tantum' is a group of nouns that end in '-ing' which occur with a *plural* form and trigger *plural agreement* with the verb and *plural anaphoric pronouns*, as the examples below illustrate:

- (55) *All bearings herein are magnetic.
She was learning to love Crawford and its belongings.
She set fire to the hangings of the room next her own.
The incomings and outgoings of the private purse are faithfully set down.
Here are the savings of years of economy.
The heavy cart-horses shipped and stamped upon the rough stones, shaking their bells and trappings.*

All these nouns, with quite few exceptions (e.g. *earnings*, *leavings*) have a *singular* form as well, hence they seem to qualify as well-behaved *general terms*. Nevertheless, most of these nouns qualify in the singular form as ‘*event nouns*’ that is to say they designate an ‘*act*’ or ‘*process*’ and semantically and syntactically behave like uncountable/mass nouns. We might assume that they undergo the recategorization MT → CT along one of the metonymic rules introduced in the previous sections, but the matter at hand is not so easy to deal with since it is an acknowledged fact that *-ing* nominalizations hardly ever allow recategorization.

The conclusion we can draw as far as *plurale tantum* nouns are concerned is that what traditional grammars regard as a homogeneous class has proved to be non-homogeneous with respect to the distinction mass term – countable term. The class could roughly be divided into two large sub-classes: a sub-class that exhibit *mass noun* properties and a subclass that shows *countable noun* properties. The presence of in-between cases like the ones discussed above clearly indicate that the distinction between mass noun and countable noun is not *discrete* but *squishy* or *scalar*, some nouns meeting some but not all count/mass noun properties.

8. THE SYNTAX OF THE MASS-COUNT DISTINCTION

The analysis so far has assumed that, in English, nouns are marked in the lexicon as [\pm count]. We have mentioned several times so far that the distinction is not *ontological*, i.e. the distinction does not lie in the ‘stuff’ nouns name, it is independent of how

things are structured in the world; proof for this statement, as already mentioned is the fact that there are pairs of listemes designating the same entity but one member of the pair is countable and the other uncountable (e.g. *shoes* vs *footwear*; *clothes* vs *clothing*; *coins* vs *change*; *plates* vs *crockery*). This distinction, as we have stressed, is rather *grammatical*. The approach we have adopted is that nouns are listed in the lexicon with a certain feature value [+ or – count) and we have postulated *lexical rules* that map count terms into mass terms and the other way round. The solution adopted is characteristic of *lexicalist approaches* and comes in handy for the *recategorization* of mass/count nouns; it is also adopted by lexicographers for practical reasons: nouns are listed with their countable and uncountable uses.

In current linguistic research, within a framework that associates *grammatical features* with *functional structure*, such a lexical approach appears to be conceptually redundant. If nouns are *lexically* marked as *count* or *mass* why should *syntax* reiterate this marking, what is after all the *function* of the *plural marker* and /or the *indefinite determiner a/an* and the *quantifiers*? Moreover, a lexicalist approach fails to capture the fact that there is a generalization that applies to just all types of nouns (proper names and common names) and which cuts across languages. It has also been remarked that *type shifting* (i.e. recategorization) is blocked whenever a noun is *marked* by means of overt inflection or functional structure: *apple* may be interpreted as either *mass* or *count*, but not so *apples* (e.g. **much apples*), which must be interpreted as *plural* and *count*. Thus, grammatically marked plurality can never undergo *recategorization/type-shifting*. Given the fact that a formal distinction *must exist*, that there *must be* an account of why mass nouns and count nouns are coercible but not so plural, a more economical solution has been suggested in current linguistic

theory, namely *to eliminate* the specification in the lexicon, the mass/count distinction being *syntactically encoded*.

This does not mean that lexicon specification is entirely ‘useless’, since *there are* lexical items which will be *lexically specified for plurality*. *Pluralia Tantum* nouns (e.g. *tools, items of clothing, body parts*) are a case in point. Just like regular plurals, most of the ‘pluralia tantum nouns’ we have discussed in the previous chapters, cannot be coerced into a *mass context* or *count context*. These nouns are considered to be *lexically* marked for plurality. This kind of plurality cannot be overridden or ignored by grammar, unlike the plurality of *salts* or *wines*. In what follows we shall highlight the main assumptions of one of the formal solutions suggested for the pervasive flexibility of nouns described in the previous subchapters.

According to Borer (2004) it is *syntactic structure* exclusively that gives rise to the *count/mass* distinction.

The default value underlying the mass/count distinction is the one associated with less structure, i.e. *the mass reading*. What the above statement means is that all nouns are *unspecified* for any properties, mass and count nouns included, and all nouns are *mass*, by default.

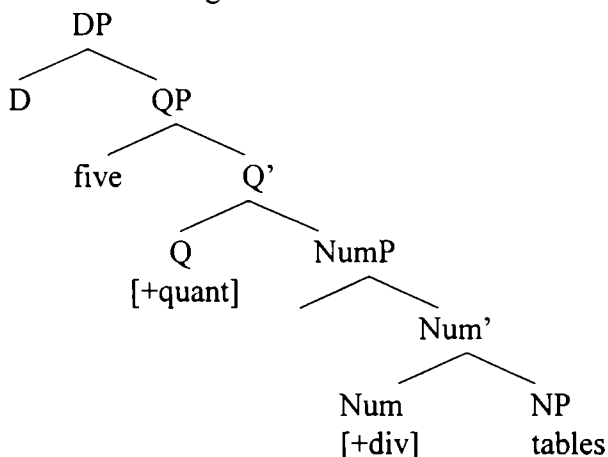
In order for a noun to interact with the *count system* of a language it needs to be *portioned out*. This *portioning out function* is achieved differently in different languages. In English this function is performed by the *plural marker* #s and the *indefinite article* a/an.

As we have seen, the role of the *plural marker* is to assign the nominal phrase to a *semantic* or *grammatical* class. The plural marker (and the indefinite article) head a Num(ber) P(hrase) which checks *plurality*, understood as *divisibility* [+DIV]. The NumP in its turn may be in the domain/context of quantifiers (all, many, every, etc), cardinals, ordinals which head a Q(uantifier) P(hrase)

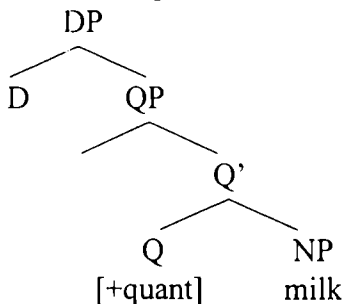
the role of which is to specify the *specific quantity* to the divisions created by the plural. So, the function of the *plural marker* is to *divide*, to *portion out* the mass.

The role of the *indefinite article* is to assign a *singular interpretation*, since *singularity* is not *overtly* marked on lexical stems in English. Besides, given the fact that *indefinite articles* are in *complementary distribution* to *plural markers* (i.e. a cat/a milk vs *a cats) indefinite articles will also have the function to *divide/portion out* the mass, checking the feature [+DIV] that heads the NumP. Hence, the *indefinite article* in English has a double role: it is both a *divider* and a *counter* (i.e. it also checks the [+quant] feature of the QP). We give below the three types of configurations that will account for the interpretation of nominals: singular, plural and mass; as can be noticed in (55iii) for singulars the counting function and the dividing function cannot be separated; the article originates under Num⁰ to check the [+div] features, then moves to Q^o to check the [+quant] feature and finally to D:

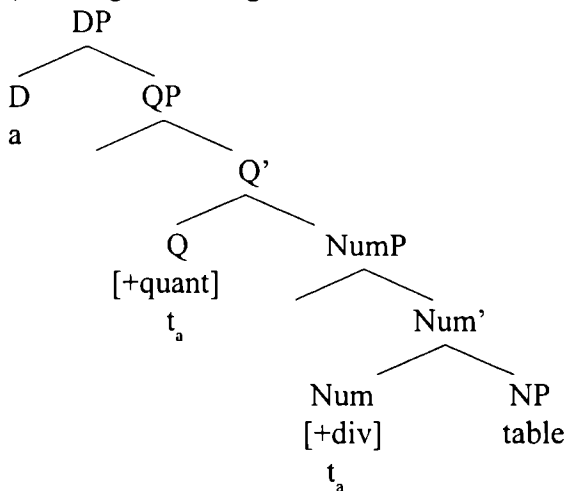
- (55) (i) countable configuration: five tables



(ii) mass configuration: much milk



(iii) singular configuration: a table



The assumption underlying the solution suggested by Borer is that what a grammar needs is a proper characterization and classification of determiners, quantifiers, etc i.e. the entire set of function words that delimit the lexical category N along the features [+div] and [+quant].

THE CATEGORY OF DETERMINATION

0. INTRODUCTORY REMARKS

01. The category of Determination (D) is another typical functional category of the lexical category N. The category of determiners includes a limited number of members and meet all the criteria for functional categories. The elements that share the same distributional paradigm could be grouped as follows (Cornilescu 1995:230):

- a) the definite article *the*, indefinite article *a/an* and the negative indefinite article *no*
- b) demonstrative determiners: *this*, *that*, *those*, *these*
- c) possessive determiners: *my*, *his*, etc.
- d) article –like quantifiers (that have the *syntactic* position of articles): *every*, *each*, *all*, etc.

All determiners are assumed to head a *functional* projection D which obligatorily subcategorize for an NP complement. This analysis of determiners as heads has a great deal of plausability since, from a syntactic point of view, the determiner is the most important *morpho-syntactic* element of the nominal phrase carrying, in many languages, the features of case, number, gender, determining agreement with the verb.

The *semantic* role of the determiner is extremely important. It binds the formal variable of the noun turning a predicative expression, whose referent is a property/set into a saturated expression, a *term* or an argument, which designates a particular individual or group of individuals. These two important properties of determiners have led to viewing the functional category D as head of the lexical category NP, i.e. D subcategorizes for a unique complement which is NP.

0.1. The aim of this chapter is *basically* to offer a comparative (syntactic/semantic) account to the analysis of the English **definite** and **indefinite articles** and to show that, although they belong to the same distributional paradigm, there are important differences between the two. The differences between the definite and indefinite articles can be accounted for by the affinity between the definite article *the* and the demonstrative *this* on the one hand, and between the indefinite article *a(n)* and the numeral *one* on the other.

As we have seen in the previous chapter, the first empirical observation that we can make is that the definite and indefinite articles subcategorize nouns differently. They are both attached to a noun, but the definite article *the* is neutral with respect to the opposition *countable-uncountable*, or *singular-plural*, thus being able to accompany any kind of noun (with the exception of proper names), whereas the distribution of the indefinite article *a(n)* is restricted to countable singular nouns.

Moreover, the *definite* and *indefinite* articles show some differences from an ontological point of view, i.e. differences that arise from the types of entities implied by their use. While the *definite article* can determine a noun whose reference may be situated at any ontological level (*object-level* individual, *kind-level* individual), the *indefinite article* cannot determine a noun designating a *kind* and hence, cannot accompany a mass term (MT), unless the MT is recategorized into a countable term, as we

have seen in the previous chapter. In Borer's (2004) terms the *indefinite article* has been characterized by functioning as a *counter* and as a *divider*.

Before we embark upon the study of the English definite and indefinite articles, in order to identify their basic and derived values/uses/functions, we shall briefly introduce some basic theoretical notions necessary for our analysis.

1. THEORETICAL ASSUMPTIONS

Natural languages contain specialized expressions through which people point out to (or introduce) individuals, things, times, places etc. The act of pointing out (reference) is achieved by means of expressions such as: (i) *proper names* like *William, Mary, Elizabeth, John Brown, Hyde Park, Covent Garden*, etc; (ii) *definite descriptions* such as *the clever man, the house, the book (on the table), this house, my dog*, etc. i.e. expressions made up of a *definite determiner* and a *nominal*; *indefinite descriptions*, i.e. expressions that consist of a *indefinite determiner* like *a/an* or *some* and a *nominal head*; (iii) *pronouns* like *I, you, he, she*; (iv) *adverbs* like *here, there, yesterday*, etc.

Linguistic expressions, whether simple or complex, can be used over and over again, in different ways, at different times or places and by different people in order to say (communicate) different things and contribute to the efficiency of language in the sense that all *these expressions* can have different interpretations (or rather 'referents') even though they retain the same linguistic meaning (*sense* or *intension*). (Barwise and Perry, 1983).

The distinction between the *sense* (i.e. intension) of a linguistic expression and the different *interpretations* (i.e. extensions) contextually associated with it goes back to a

well-known paper by David Kaplan (1973) '*On the Logic of Demonstratives*' which investigates a number of sentences including expressions like *I, yesterday, this, that, now, then* which have a constant linguistic sense but acquire different interpretations each time they are used by different people at different times or locations.

According to D. Kaplan (1973:4) a sentence like '*I was insulted yesterday*' has a constant sense independent of the context in which it is used: i.e. the proper use of '*I*' is to point to the speaker of the utterance, '*yesterday*' constantly points to the day before the day of speech time, etc. On the other hand '*what is said*' by this utterance depends on *who* the speaker is and *when* the utterance is said, i.e. '*I*' will point to the ever-changing speaker who utters the sentence, '*yesterday*' acquires different interpretations depending on the day the utterance is made. So '*what is said*' depends on the one hand on the *sense* of the expression used, but also on the *context*, *place*, *time*, *different people*, etc. that use the respective expression. Kaplan called the constant sense of an expression its CHARACTER and the CONTENT was its interpretation and it was context-dependent.

To summarize, we can say that '*what is said*' by an utterance (i.e. the interpretation of an expression) is the product of factors some of which are *fixed solely by language*, and others which vary with the *expression in use*. The former is the *linguistic sense* of the expression, the latter is *context of use*. The factors (relevant for our discussion here) that make up the *context of use* are, according to Barwise and Perry (1983):

- indexicality or deixis
- resource situation.

The factors into which the *context of use* has been broken involve the exploitation of the *speaker's* and *hearer's* place in the world. The factors mentioned above have *different roles* to play, but the important fact for our discussion of the system of *articles*

is that all these factors point to one important idea about natural languages, namely: the linguistic sense of an expression, in general, greatly underdetermines its interpretation on a particular occasion of use, or for short, *sense underdetermines interpretation* (Barwise and Perry, 1983). So, what is meant is *that an expression can be used over and over again with the sense learned once and for all by all the members of the linguistic community, but its interpretation may vary function of the context of use*. In what follows we shall introduce the elements that are subsumed under the above – mentioned factors.

1.1. INDEXICALITY AND INDEXICALS

Linguistic expressions like *I, you, here, there, this, that, yesterday, then*, etc., are known as *deictic elements* (or *indexicals* or *pointing expressions*), and represent ways in which language grammaticalizes (encodes) information about the *persons, place, and time* of the *act of utterance*, i.e. communication always takes place between two persons (encoded as *I* and *you*), at a certain time (grammaticalized in *adverbs of time* and in *tense markers*), at a certain place (grammaticalized by *adverbs of place* and *demonstrative pronouns*).

The term ‘*deixis*’ is of Greek origin and could be paraphrased as ‘pointing’ or indicating’. *Deixis* deals with the dependence of the interpretation of a linguistic expression (and hence of a sentence) on facts about the discourse situation and it concerns the study of the way natural languages grammaticalize information about the persons, time and place of the utterance, i.e. the indexical elements (pointing expressions) grammaticalized in the language. The traditional categories of *deixis* are *person deixis, place deixis* and *time deixis*.

Person deixis concerns, as shown above, the encoding of the *role of the participants* in the speech event in which the utterance is delivered; the *first person* represents the grammatical realization of the *speaker's reference* to himself, *second person* the encoding of the speaker's reference to one (or more) addressee(s), and third person, the encoding of reference to person and entities which are neither speakers nor addressees. The way in which participant roles are encoded in natural languages are *pronouns*.

Place deixis concerns the encoding of *spatial relations* relative to the location of the participants in the speech event, such as the distinction between proximal (close) or distal, grammaticalized as demonstratives (*this-that*) or deictic adverbs (*here-there*).

Time deixis concerns the encoding of *temporal points* relative to the time at which the utterance is spoken. Just as *place deixis* encodes spatial locations anchored to the *place of utterance*, so *time deixis* encodes times anchored to the *time of utterance*. Time deixis is grammaticalized in *deictic adverbs of time* (*now, then, yesterday, last year, tomorrow, etc.*) and *tense markers*.

To the three traditional categories mentioned, two more have been added, namely *discourse deixis* (or text deixis) and *social deixis* (Fillmore, 1971, Levinson 1983). *Discourse deixis* deals with the study of the entire text within which the utterance is located. *Social deixis* concerns, in general, the encoding of *social distinctions* relative to *participant roles*, in particular those aspects of social relationship holding between speaker and addressee(s) or speaker and some referent. Levinson (1983) shows that many languages encode distinctions of fine gradation between the relative ranks of speaker and addressee grammaticalized in the morphological system of a language, e.g. *the use of honorifics*, choices between *pronouns, summons forms, titles of address*.

The facts of deixis, as Levinson (1983:54) observes, point out to the fact that‘communication has an egocentric organization which is encoded or grammaticalized by deictic elements’. If deictic elements can be viewed as *anchored* to specific points of the speech event, then the unmarked points of anchorage, constituting the unmarked deictic center, are assumed as follows (cf. Levinson, 1983:63-64):

- the central person is the speaker;
- the central time is the time at which the speaker produces the utterance;
- the central place is the speaker’s location at utterance time.

Levinson suggests, as a means to visualize the deictic center, “a four dimensional space, composed of the three dimensions of space plus that of time, in which the speaker stands at the center. Radiating out from the speaker are a number of concentric circles distinguishing different zones of spatial proximity; through the speaker passes a ‘time-line’, on which events prior to his present utterance, and events prior to those, can be linearly arranged, and similarly events at points and spaces in the future”.

1.2 RESOURCE SITUATION

As we have argued in the previous paragraph, *indexicals* or *deictic elements* are considered to function as expressions meant to *identify* (to establish the reference of) an individual or (a set of) individuals in *a given communication situation*. The set of objects in relation to which the reference of an expression is to be established can be delimited by what Barwise and Perry (1983) call a ‘*resource situation*’. In certain communication situations, the speaker exploits certain facts in order to obtain other facts.

There are different ways in which a resource situation can be made available:

- by being directly perceived by the speaker and/or the hearer.
- by being the object of common knowledge about the world or part of the world)
- by being built up by previous or subsequent discourse.

1.3. RESOURCE SITUATIONS AND INDEXICALS

Depending on the type of *resource situation* made available, *deictic expressions* are said to have different *functions or uses or values*.

If the speaker has direct, physical, moment by moment monitoring of the resource situation, the function is *gestural*. If the speaker uses a deictic expression which exploits some common knowledge about the world, the function is *symbolic*.

The *gestural* and the *symbolic* functions of indexicals are subsumed under the general term '*deictic*' (Fillmore 1971, Levinson 1983).

Finally, if the *deictic expression* exploits a resource situation built up by *previous* or by *ensuing discourse*, deictic expressions may display '*discourse*' *functions* (also known as *non-deictic functions*).

The *non-deictic* or '*discourse*' use of deictic elements includes two different traditional functions, the so-called (i) *anaphoric* and (ii) *cataphoric* functions. The unifying characteristic of these two functions is their common *syntactic nature*. The distinction into '*anaphoric*' value and '*cataphoric*' value is based on whether reference by means of deictic elements relies on *previous discourse (anaphoric use)* or on *subsequent/ensuing discourse (cataphoric use)*.

Here are some examples that illustrate the ‘*gestural*’ function/ use of deictic expressions. As the name of this use/value of deictic elements suggests, the reference of the expressions is established by *physical presence* at the speech event and an accompanying pointing gesture to the intended object present in the resource situation:

- (1) ***This book*** is the one you should use.
 That is the Swiss embassy, over ***there***.
 This lollipop is for you, Marvin (Lakoff 1974:346)
 He’s not the Duke, ***he*** is. ***He’s*** the butler.

Instances of the ‘*symbolic*’ function of deictic expressions would be:

- (1’) ***You*** can all join me for a coffee during ***this break***.
 This city is really beautiful when it is not dirty.

Fillmore (1971) remarks that the *symbolic* use of a deictic expression involves ‘merely knowing certain aspects of the speech situation’ and, we might add, knowledge of these aspects does not, necessarily, come by direct perception.

As already mentioned, the ‘*discourse*’ use/function/value of deictic expressions is *syntactic* in nature since the objects/individuals picked out/referred to by indexicals are located at the *level of discourse*, i.e. in this case, *indexicals serve as expressions that connect the speaker to the discourse which becomes the resource situation*. The two traditional values, as already mentioned, are the *anaphoric* value and the *cataphoric* value. The two terms are Greek loans.

The term ‘*anaphora*’ could be paraphrased as ‘*backwards-looking*’ or ‘*pointing backwards*’, i.e. to *previous* discourse. Indexicals in this case function as ‘*anaphors*’ since they point backwards to an individual already introduced in previous discourse, known as ‘*antecedent*’.

All *anaphoric processes* are syntactic in nature and presuppose the existence of an '*antecedent*' which controls the '*anaphor*'. The *syntactic requirement* for anaphoric processes is a relation of *co-reference*, i.e. *the antecedent and the anaphor refer to the same individual*. In other words, *the reference of indexicals is assured by the discourse which precedes the use of the respective deictic expression*.

Pronouns and other indexicals are frequently used anaphorically to avoid repetition. The examples below illustrate cases where the anaphor is a personal pronoun, a demonstrative and an adverb:

- (2) (i) *My brother is a doctor and he lives in Switzerland.* (antecedent) (anaphor)
(ii) *Bush made his long-awaited announcement yesterday. This statement confirmed the speculations of many observers.*
(iii) *A: I visited London last April*
B: I have never been there. What is it like in spring?

The term '*cataphora*' may be paraphrased as '*pointing forwards*' i.e. to *subsequent discourse*. Cataphoric uses are also syntactic in nature and they involve the presence of a specification in the ensuing discourse that ensures the possibility of pointing out to the intended presupposed element. Here are some examples of *cataphoric uses* of deictic elements:

- (3) *What I want to say is this. Please drive carefully.*
If you see him, will you tell Bob to telephone me?

In the example above the demonstrative pronoun **this** points forward to subsequent information, whose role is to make us correctly interpret **this**.

Lyons (1975) remarks that, with indexicals, there are cases when the functions overlap. Consider the following example, where the demonstrative has such a 'mixed' use: *deictic gestural* and *non-deictic anaphoric*:

(4) *I cut a finger; this one.*

This is used *anaphorically*, pointing to the antecedent **a finger**; simultaneously there must be a *presentation* of the intended finger in order for the sentence to be properly interpreted. Given the example above, the conclusion we can draw, following Lyons (1975), Lakoff, R. (1974) and Levinson (1983) is that *the non-deictic uses* of some indexicals (in particular demonstratives and adverbs like *here/there*) always retain some of the basic *proximal/distal information* contained in their *deictic use*; that is to say that *the non-deictic uses are to be regarded as derived from the deictic ones*, i.e. deictic elements constitute cases in which the resource situation instead of being physically perceived is built up mentally by the unfolding of discourse. This brief discussion of *deictic elements* shows unambiguously that the interpretation of an utterance crucially depends on the *constant sense* of the linguistic expressions plus factors about the *context of use*. The reference of these expressions (and hence the interpretation of the utterance) differs according to the identity of the speaker, the time and place of utterance.

2. THE DEFINITE ARTICLE AND DEFINITE DESCRIPTIONS

2.1. INTRODUCTORY REMARKS

Linguistic expressions that include in their make-up the definite article '*the*' and a nominal head are known as '**definite**

descriptions', e.g. *the man, the book, the cat, the house, the wine on the table*, etc.

The definite article is characterized as a 'strong determiner' since definite descriptions have pressupositional readings, i.e. definite descriptions express *familiarity*, as opposed to *novelty*. Just like in the case of indexicals, 'the' conventionally implicates that there is a subset of entities in the universe of discourse which is mutually manifest to speaker and hearer and within which definite referents *exist* and are *unique*. Definite expressions, alongside demonstrative expressions, personal pronouns and proper names function as *singular terms*. As already mentioned, the *definite article* and *indefinite article* belong to the same distributional paradigm, they both combine with nouns and are viewed as means of delimiting the part of speech '*noun*'; nevertheless, there are important differences between them, both from a *semantic* and a *pragmatic* point of view. These differences could be accounted for by the affinity between the definite article and the demonstrative 'this', on the one hand, and between the indefinite article *a(n)* and the numeral '*one*' on the other hand. The definite article is able to attach to any kind of noun, being neutral to the opposition singular-plural or countable-uncountable (see (5) below). The only exception is the impossibility to combine with '*proper names*'. The restriction which is operative on the *definite article* with respect to its use with a proper noun is semantic in nature and actually rules out a redundancy, i.e. the double presence of the semantic feature of uniqueness: both proper names and definite descriptions have the role to *uniquely* identify an individual (i.e. point to a 'unique' reference).

As already stated, the definite article can determine a noun designating an *object-level* individual as well as *kind-level individual*, as the examples below illustrate:

- (5) a) *The book is on the table.*
The books are on the table.
b) *Cheese is healthy.*
The cheese is in the fridge.

The discussion on the role of the definite article and the function of the definite description will mostly proceed at a *pragmatic* level (as in the case of indexicals) but we shall also introduce some *semantic notions* that will help us understand the difference between the definite and indefinite articles and descriptions.

2.2. Logicians have claimed that simple expressions like *man*, *dog*, *book*, etc. do not ‘refer’ (in the sense of pointing to a particular individual) but rather express a *property* and *designate/denote* a **set** of individuals that have the *property* of ‘being a man/dog/book’. In order to make an expression ‘referential’ i.e. *pick out/identify* a particular individual(s) from a **set**, we add a *determiner* like the *definite* article. That is why we say that it is DPs that may occur as arguments (as syntactic subjects and objects).

Logicians have argued that *definite descriptions* are of the same logical type as *proper names*. Nominals accompanied by definite articles are assumed to have ‘*interpretive independence*’ unlike nominals accompanied by other types of elements that belong to the same distributional paradigm (i.e. the category of determination) such as *every/each* or *all*, and even the indefinite article *a(n)*, which are known as forming a subclass called ‘*quantifiers*’. To have ‘*interpretive independence*’ means, roughly, that there is no ambiguity as to the ‘*referent*’ (the identified individual) designated by the respective expression. Consider the examples below:

- (6) a) *Every student has read a book by Chomsky.*
 b) *Every student has read 'Syntactic Structures'.*
 c) *Every student has read the assigned book.*

The sentence in (6a) is ambiguous: the first interpretation (or reading) is: '*every student has read some book by Chomsky, not necessarily the same*'; the second interpretation is: '*there is a (particular) book by Chomsky that every student has read (i.e. every student has read the same book by Chomsky)*'. The ambiguity of the sentence is due to the lack of '*interpretive independence*' of the elements '*every*' and '*a*', which are called quantifiers. The sentences in (6 b,c), on the other hand, have only the second interpretation '*there is one particular book by Chomsky which every student has read*'.

Since definite descriptions have '*interpretive independence*' (i.e. they are insensitive to their logical environment as far as their interpretation is concerned), they can be viewed as *constants* (alongside *proper names*). Given this state of facts, logicians like Russell (1905, 1940) proposed an analysis of definite descriptions which captures the fact that the function of the definite article is that of indicating 'the existence' and 'the uniqueness' of the reference associated with a definite description. The '*interpretive independence*' of definite descriptions has been argued to be due to some *semantic aspect* inherent in these expressions.

2.2 In the previous paragraphs we have argued that a deictic expression can be interpreted as far as its *reference* is concerned by relating it to a set of objects which contains the individual in question. As we have seen this set is pragmatically delimited by resorting to what Barwise and Perry (1983) call a '*resource situation*'.

Hawkins (1978) argues that the reference of a definite (and indefinite) expression which denotes an *object level individual*,

can be established along the same line, i.e. by relating it to a set of objects which contains the object(s) in question. Hawkins considers that this set of objects is *pragmatically delimited* and that the *definite article* (or rather *the definite description*) refers ‘inclusively’ to the totality of objects belonging to the *pragmatically delimited set*. Consider the examples below:

- (7) (a) Bring **the wickets** in after the game of cricket is over,
please
(b) I must ask you to move **the sand** from my gateway

In (7a) the definite description ‘*the wickets*’ refers to *all six wickets* necessary for a game of cricket. If the hearer only brings five of them, the speaker will not be satisfied. Similarly, in the case of *kind-level individuals*, the expression ‘*the sand*’ in (7b) refers to *all the sand* that is in front of the gateway, not just part of it.

The set of objects in relation to which the reference of a definite description must be established is pragmatically delimited by a ‘*resource situation*’. As in the case of indexicals, the *uniqueness of reference* of *definite descriptions* is assured by the ways in which resource situations become available for exploitation:

- by direct perception
- by being the object of common knowledge about the world
- by being built up by previous or subsequent discourse

In what follows we shall dwell on the *values/uses of the definite article* (and implicitly of *the definite description*) which represent differences in the ways in which resource situations become available.

- (i) The deictic (gestural) use of definite descriptions: resource situations perceived by direct perception.

The deictic value is based on speaker and listener perception of the resourcesituation. We can distinguish several subcases here illustrated in the examples below: (a) both the hearer and speaker have access to the resource situation (see 9a); (b) only the hearer has direct perception of the resource situation (9b); (c) only the speaker has direct access to the resource situation (9c); (d) the object designated by the definite description is not directly perceived by either speaker or hearer in a given resource situation (9d).

- (8) (a) (i) Close **the door**, please!
(ii) Close **that door**, please!
- (b) (i) PC 48, catch **the jailbird**!
(ii) PC 48, catch **that jailbird**!
- (c) Harry, mind **the table**.
Don't come into this house, my friend, I'll set **the dog** onto you!
- (d) Beware of **the deer**! / Don't feed **the deer**!

In (8a) the *definite description* is used *deictically* to point to the intended door, present and uniquely identifiable in the resource situation that is common to both *the speaker* and *the hearer*. In this case, *deictic the* may overlap with the *demonstrative determiners*, as the example in (8a(ii)) illustrates. According to Hawkins (1978) the demonstrative determiner **that** can be used in those cases in which *the hearer* has direct, physical perception of the resource situation that includes the object in question, that is to say the use of the demonstrative is constrained by a visibility condition. The definite article **does not** have a visibility condition for its use.

The examples in (8b) illustrate the case in which only *the hearer* has direct access to the resource situation. The utterances

in (8b) could be spoken (over the radio) by a policeman chasing an escaped prisoner; the speaker knows about the prisoner's presence in the hearer's resource situation. The speaker cannot see the intended individual at the time of the utterance but can *instruct* the hearer, who has direct perception of the resource situation, to *perceive/locate* and catch the escaped prisoner. In this case *the* is again substitutable with *that* since the hearer is actually instructed to *perceive* the object uniquely identifiable in the immediate situation.

The examples in (8c) illustrate the case when *the hearer* has no direct, physical access to the object designated by the definite description. Both sentences are uttered by *the speaker*, who has direct perception of the resource situation, to *inform* the hearer, who for one reason or another has *no* direct perception of the object in question, of the presence/existence of the object designated by the definite description. As can be noticed the demonstrative *that* is no longer a possible substitute for the definite article since, as Hawkins (1978:114) puts it "*the use of the demonstrative requires that the hearer is actually able to see the object in the immediate situation, while the definite article does not have a visibility condition for its use...The hearer is instructed to locate the object in the immediate situation of the utterance. In contrast to the demonstrative, he is not being instructed to actually perceive it, but only to assign it to the situation he is in, in the sense that he understands that it (the object) exists in the situation*" (Hawkins (1978:114).

The examples in (8d) illustrate the situation in which the objects designated by the definite descriptions, in this case '*the deer*', are *invisible* in the given resource situation (the two sentences could be notices in a zoological garden/park). In both sentences the hearer is instructed that he is to assign the object designated by the definite descriptions to the resource situation he finds himself

in – more precisely, he (the hearer/receiver) is to understand that the object is among the objects that make up the resource situation.

- (ii) The *deictic-symbolic* function of definite descriptions – the resource situation is exploited by being the object of common knowledge about the world (or part of the world)

Consider the following examples that all include definite descriptions:

- (9) (i) *Can you give me a lift to **the town hall**?*
(ii) ***The prime minister** has just returned from a visit in the countryside.*
(iii) *Where is **the church**?*
(iv) *Who are the bridesmaids?*
(v) ***The sun** is shining, so let's go for a ride in the countryside.*

The intended objects designated by the underlined definite expressions '*the town hall*', '*the prime minister*', '*the church*', etc. are considered to be objects familiar to both speaker and hearer, i.e. the describing phrase can be uniquely satisfied only if the object designated is known to belong to (a certain part of) the world that is familiar to both speaker and hearer alike, that is speaker and hearer share some *specific knowledge about some part of the world*. The expression '*the prime minister*' connects the speaker to the prime minister of his own country that would constitute the resource situation shared by speaker and hearer. If the speaker were in a *foreign country* he would have to be *more specific* about which *prime minister* he is talking about, since the physical situation the speaker is in could lead the hearer to understand that reference is made to the prime minister of the country he is in. If such

confusions are deemed possible by the speaker he could use other definite/identifying determiners such as *possessives*, e.g. *our prime minister* or *Romania's/England's prime minister*. The possessive determiners connect the speaker to the intended object in one and only one resource situation.

The identification of the correct resource situation is essential, otherwise, as we have seen, confusion might arise as to the reference of the *definite description*. What we mean is that in the case of *singular definite descriptions* the totality of the objects of the pragmatically relevant set is reduced to *one unique member of the set*. The limiting of the set to a *single object* that is assigned *unique reference* is due, in most cases, to the correct identification of the resource situation, which is built *on specific or general knowledge* shared by speaker and hearer. In example (9iii), if in a village a passer-by asks this question, the expression '*the church*' refers '*inclusively*' to the totality of churches which make up the set of objects pragmatically relevant. '*The church*' is assigned unique reference since, in this particular case, it is the *general knowledge* shared by the speaker and hearer that limits the set to *one single church* uniquely identifiable in the given resource situation; for instance, the speaker and hearer alike know that, in general, a village has one church, one townhall, etc. In other circumstances – a larger village with at least two churches – the speaker might substitute *the name* of the church, say *Trinity Church*, for the expression *the church*. Along the same lines, the question in (9iv) is successfully decoded on the basis of *general knowledge* shared by speaker and hearer, namely that weddings typically have *bridemaids* along *the bride, the bridegroom, the best man*.

Notice that in this case as well, i.e. plural definite descriptions, the definite description *still has unique reference* with the difference that the uniqueness refers to an entity of a different ontological level than that of objects (*the set of bridemaids belonging to the*

given resource situation). Notice that all the examples discussed share one common characteristic, namely, the use of the definite article is based *on knowledge* of the existence of certain objects in certain situations. In all the cases discussed so far *the function of the definite description* is to *instruct the hearer to locate the intended object within a resource situation*. This use of the definite article is known as *the deictic symbolic use*.

(iii) Discourse functions of definite descriptions; the *anaphoric* and *cataphoric* functions.

The *discourse uses* of the *definite article* run parallel to those of *indexical expressions*. In this case the resource situation is built up by *discourse* and the referent of the definite descriptions is to be located among discourse objects. Unlike the *deictic* functions of the definite article which rely on the possibility of connecting the use of linguistic expressions to the *world*, the *discourse functions* are syntactic in nature and they are based on the syntagmatic rules that make the progress of discourse possible.

The distinction into *anaphoric* and *cataphoric* is based on whether reference by means of definite descriptions relies on *previous discourse* (anaphoric use) or on *ensuing discourse* (cataphoric use). In what follows we shall discuss these two non-deictic uses in more detail.

The *anaphoric* function is the result of a syntactic process based on the relation between an *antecedent noun phrase* and an *anaphor*. The *definite description* functions as *the anaphor* to an *indefinite description* (the indefinite article has an *epiphoric* value) which introduces the object/the referent into the domain of discourse and, hence, functions as *the antecedent*. Consider the examples below:

- (10) (i) *Once upon a time, **a child** was born in Beethlehem. **The child** was baptized Jesus.*
- (ii) *When she entered her office she saw **a little man**. **The little man** was sitting in her armchair scratching his nose.*

In the examples above the indefinite descriptions '**a child**' and '**a little man**' function as syntactic *antecedents* to the *anaphors* expressed by the corresponding *definite descriptions*. The role of the *indefinite description* is to *introduce* individuals in the domain of discourse which can be resumed later on in the discourse by *definite descriptions*, i.e the *uniqueness of reference* of the definite description is ensured by the discourse that preceeds the use of the definite description. This is made possible in virtue of the syntactic relation established between the *antecedent noun phrase* and the *definite anaphor*. In fact, the linguistic discourse acts as '*resource situation*' in such cases.

The pure anaphoric uses are less frequent than what is known as '*associative anaphora*' which is a special case of anaphora and which has been extensively illustrated by Christopherson (1939). Apart from being the most frequent use of the definite article the cases of associative anaphora are not only the most interesting but also the most complex. Here are some examples:

- (11) (i) *Ian inhereted **a house** but unfortunately he could not make it his home, since **the roof** was leaking and **the windows and doors** needed repairing.*
- (ii) *I've still got **a book** of nursery rhymes I had as a child, but unfortunately **the cover** is torn.*

In the examples above the *definite descriptions* '**the roof**, **the windows and doors**, **the cover**' refer backwards, even if

somehow indirectly, to the antecedents '*a house*' and '*a book*'. The notion of '*part-whole*' seems to play an important role in establishing the relation between the two nominal phrases.

The mechanism of *associative anaphora*^v involves two distinct mechanisms:

- (i) the *syntactic rules* that control *anaphoric processes* and
- (ii) the *appropriateness* of the association between the antecedent – '*a book*' for instance – and the anaphora *the cover/the content/the author/the pages*.

This association or relation is established on the basis of *our encyclopedic or conceptual knowledge* of the world we live in, that is, the use of the definite article in the case of *associative anaphora* rests on the conceptual knowledge of the speaker and hearer about the existence of a certain relation between certain objects. In our examples above, the conceptual, semantic relation is known as *partonymy*, i.e. a semantic relation established between the whole and its constitutive parts. In general the noun phrase that designates *the whole* acts as *the antecedent* while *the anaphor* is *a certain part* to be associated with *the whole*. Besides *partonymy*, *hyponymy* (an inclusion relation) and *synonymy* (sense relation) can also function as conceptual relations upon which *associative anaphora* is based, as the examples below illustrate:

- (12) (i) *Bill was working at a lathe the other day. All of a sudden the machine stopped turning.*
- (ii) *Fred was wearing trousers. The pants had a big patch on them.*

The hearer's conceptual knowledge and his knowledge of language will help him understand the inclusion relation between

lathes and *machines*, or the similarity of sense between *trousers* and *pants*.

Related to this problem, Hawkins (1978:124) remarks that a distinction should be made between ‘*permanent*’ associations and ‘*temporary*’ non-characteristic associations; the latter play *no part* in semantic relations and, hence, are not involved in associative anaphoric processes. A large number of cases involving associative anaphors are based on relations established on ‘*inalienables*’ i.e. characteristic properties: *a car – the length – the colour – the weight*, etc.

The *cataphoric* use of the definite article is also based on linguistic context that acts as a resource situation. The uniqueness of reference of the definite description is secured, in this case, by discourse that is subsequent to the respective definite description. Consider the following examples:

- (13) (i) **The man** *who stands in the corner* is my father.
(ii) **The first family home** *of which Nancy was conscious* was **the house** *in West Grace Street*.
(iii) **The essays** *collected by Michael Astor* have been invaluable.
(iv) **The comment** *of the publisher* was completely at fault.

In the examples above the expressions in italics, namely ‘*who stands in the corner*’, ‘*of which Nancy was conscious*’, ‘*collected by Michael Astor*’, ‘*in West Grace Street*’ and ‘*of the publisher*’ are linguistic expressions, that syntactically function as *modifiers*, and their role in discourse is to increase our ability of uniquely identifying objects in discourse. In example (13(i)) the restrictive relative clause ‘*who stands in the corner*’ restricts the domain/set denoted by ‘*man*’ to just that member in the set that has the property expressed in the

restrictive clause, i.e. *the referent of the definite description is linguistically identified by the restrictive relative clause*.

Ever since Quine (1960), logicians have claimed that *relative clauses* (RCs) are means of expressing *compound properties*: thus in our example above the expression ‘*man*’ expresses the property of ‘*being a man*’ and it designates the set of individuals who ‘are men’; the expression ‘*man who stands in the corner*’ expresses the *compound property* of ‘*being a man and standing in the corner*’ and it designates *a subset* of the set of men, namely the individual who is ‘*a man and stands in the corner*’. Keenan (1975) described *complex nominals* containing restrictive relative clauses as means of designating a (sub)set of individuals by first choosing a larger set (the domain) and then restricting (limiting) it to just those members that have a second property expressed in the restrictive relative clause.

The prepositional phrases ‘*in West Grace Street*’ and ‘*of the publisher*’ that act as *modifiers* of the *head noun* in the *definite description* have the same function of *limiting* the set to one unique member. In all these examples the definite article has a *cataphoric use*, since it points forward to the linguistic information that identifies and locates the intended object or set of objects. Actually the definite article determines (has in its scope) the entire complex noun phrase, i.e. the [man who stands in the corner], the [first family home of which Nancy was conscious], the [house in West Grace Street], the [essays collected by Michael Astor], etc.

The general observation that is in order at this point is that *the uniqueness of reference* of definite descriptions *does not result from the semantic features* of the *definite description* but from the relation holding between *the reference* of a definite description and the set of objects *pragmatically relevant in a given situation*. It could also be argued that the ‘inclusive’ mode of reference is *not a semantic feature* of the definite noun phrase since we can say something like the following:

- (14) Please, bring me **the apples** from the basket, but not all of them.

The example above illustrates Declerck's (1986) observation that 'inclusiveness' in the case of definite descriptions is only *conventionally / conversationally* (i.e. pragmatically) implicated by the use of the definite article and that this feature can be suspended under certain circumstances.

Though definite descriptions have been characterized as 'constants' (Russel 1905) they may acquire *ambiguity* at the *pragmatic level* of analysis. A distinction can be made between a *referential use* and a *non-referential (attributive)* use of definite descriptions (Donellan 1966).

A *definite description* is used purely *referentially* whenever substitution of a coreferential expression preserves *the truth* of the sentence, i.e. *the substitute* designates *the same object*. An example of a purely referential position is the subject position (see example 15(i)).

Not all contexts in which a *singular term* may occur allow for a clear *referential reading*, i.e. not all contexts are '*transparent*'. In natural languages there exist a series of grammatical environments (called '*opaque*' contexts) that create '*referential*' opacity, i.e. the afore-mentioned ambiguity in the interpretation of singular terms: a referential and non-referential/attributive reading.

A *non-referential reading* (or '*opaque*' reading) is a reading on which the substitution of a coreferential term may fail to preserve the truth of the sentence, i.e. a reading in which any individual satisfying the description will do. Consider the example in (15(ii)) below borrowed from A. Cornilescu (1986):

- (15) (i) **The girl** is beautiful.
(ii) Mary believes that **the man** who lives upstairs is insane

- (a) Mary believes of *a certain individual*, namely the man who lives upstairs (say, *John Brown*), that he is insane. (referential reading)
- (b) Mary believes that *whoever* it is that lives upstairs is insane. (non-referential reading)

In the example above, for instance, the context is rendered ‘opaque’ by the main-clause verb ‘believe’, known as a verb of *propositional attitude*.

Definite descriptions may also occur in generic sentences, along bare plurals and indefinite descriptions, as in:

- (16) (i) *The dog is an intelligent animal.*
(ii) *The Bengalese tiger is ferocious.*

In these cases the definite description still refers *uniquely* to an entity but this entity is **no longer** an *object-level entity* but a *kind-level entity*.

To summarize, definite descriptions express *familiarity*, i.e. it is associated with previous acquired knowledge, and *uniqueness* of referent, i.e. a structured universe of discourse is assumed, with entities organized into *sets*.

According to Hawkins (1992), ‘*the*’ conventionally implicates that there is some *subset of entities* in the universe of discourse which is mutually known (i.e. familiar) to speaker and hearer and within which definite referents *exist* and are *unique*. Under this view, *familiarity* is pertinent to how the *relevant sets* are established: they must be elements of a familiar set or must be explicitly related or anchored to a mutually known individual.

The contrast between definite descriptions and demonstrative descriptions are, hence, the following:

- a) demonstrative descriptions involve a form of uniqueness relative to entities that are physically identifiable or textually introduced, *without regard to sets*.
- b) demonstrative noun phrases involve uniqueness relative to *contextual* factors, and involve a contrast between their referent and other entities that satisfy the description. In contrast, the referent of definite descriptions are *unique* in as much as they satisfy the description expressed by the noun phrase (NP) part of the definite description (DP).

3. THE INDEFINITE ARTICLE AND INDEFINITE DESCRIPTIONS

3.1. Indefinite descriptions are linguistic expressions that consist of an indefinite article ($a+N_{sg}/\text{some}+N_{pl}$). This section will deal with the description of the *indefinite article*, and of indefinite descriptions in general, its basic value and other characteristic derived values. In the previous chapter we characterized the indefinite article *a/an* as a *counter* and a *divider*, besides being a *determiner*. It selects countable singular nouns and the Cambridge Grammar of Contemporary English (2002) defines the indefinite article as 'the most basic indicator of indefiniteness'. The notion of 'indefiniteness' associated with the indefinite article summarizes the fact that *indefinite descriptions* in all their uses pragmatically convey the idea of *novelty* (Heim 1982). In contrast, as mentioned, the *definite article* connotes *familiarity* of the referent with respect to both hearer and speaker. From a semantic point of view the indefinite article is characterized as satisfying *at most* a presupposition of existence.

The basic question that underlies the present discussion is to clarify when an *indefinite description* rather than a *definite* one is used. We have seen that the role of determiners is to pick out a certain element from a *reference set*, which corresponds to whatever the *common noun* denotes. We have argued, following Hawkins (1978) that the *definite article* refers ‘inclusively’ to the totality of objects belonging to a pragmatically delimited set, i.e. in the case of definite descriptions an expression like ‘*the ball*’ is said to pick up a unique referent from a set of entities established/defined/delimited *on the basis of a resource situation*, i.e. the domain is necessarily bound to a particular/specific context of use and the speaker uses this expression to refer to the *unique ball* which is *salient* in that particular situation.

Hawkins (1978) argued that *indefinite descriptions* refer ‘exclusively’ to a member or a subset of the set of objects which is accessible to the speaker and the hearer. This means that there are objects that belong to the same set but which are not included into the reference of indefinite descriptions. The relation that holds between the reference of an *indefinite noun phrase* and the set of objects pragmatically relevant *in a given situation* is a *part-whole relationship*. Consider the examples below, borrowed from Hawkins (1978:176):

- (17) (i) *Fred bought **a book** from Heffer's*
 (ii) *He was dismayed to find that **a page** was torn.*
 (iii) *He was dismayed to find that **some pages** were torn.*
 (iv) *He then went and talked to **an author** about it.*

A book, a page refers to only one member (arbitrarily chosen) of the set of objects pragmatically relevant, in our case, *the set of books in the bookshop, the set of pages in the book*. *Some pages* refers to a subset of the set of pages that make up the book

introduced in (17i). As can be inferred, the pre-requisite condition for the use of $a+N_{sg}$, as well as, $some+N_{pl}$ is that there must be at least one more such object in the shared set which its usage can exclude. This condition also explains the interpretation of *an author* in (17iv). *An author* cannot be associated with the person who wrote the book in question, but rather a different author. *Whenever a set consists of only one member, the indefinite description cannot refer to that unique object. Uniqueness triggers off the use of the definite article*. Consider the examples below:

- (18) (i) ??He lost **a nose** in the war.
 (ii) ??I decided not to buy the house because **a roof** was leaking.
 (iii) ??**Two students** were standing outside the gate. Bill kept his eyes on them. After a while **some students** came up to him and asked him his name.

As the examples above show, the condition for the use of an indefinite description is that they refer to *one member* (arbitrarily chosen) of the set of objects which is accessible to the speaker and hearer. If the set consists of just one *single* member, then the indefinite description cannot be used to refer to that *unique* member. Reference to these unique objects can be realized by using a definite description, only. Similarly, *some+plural noun* cannot be used as pointing to ‘two students’ in (16 iii). The notion of ‘exclusiveness’ of identification for indefinite noun phrases is meant to cover this particular information, namely that: (i) *a+singular noun* cannot locate an object that is *unique* in the shared set; (ii) *some+plural noun* cannot locate objects if there are only *two objects* in question in the shared set. The discussion on the use of indefinite descriptions vs. definite descriptions is also illustrated by the following contrasts noted by Hawkins (1978):

- (19) (i) *The/*a prettiest girl at the party was Sue*
 (ii) *The *an only girl at the party was Sue*
 (iii) *John bought the/*a bigger dog of the two*
 (iv) *Fred was wearing the/*a same jacket I was wearing*
 (v) *The two Indians spoke a/*the similar language*
 (vi) *For this hat I need a big round box, don't I?*

As we can notice in the first four examples in (19) the *definite noun phrases* point to an individual which is *uniquely* identifiable on the basis of the given resource situation. In (18 v) the expression '*similar*', on the other hand, imposes the use of an indefinite description since '*similarity*' involves a sharing of some properties but not others for the object in question. In all the examples illustrating the use of the *indefinite article* given so far, the first five examples of (18) included, the reference set is *pragmatically delimited, being bound to a specific situation*. In all the examples involving definite descriptions the set identified by the nominal is represented by one member (a singleton).

Nevertheless, it is interesting to notice that, in using a indefinite description (see 18 vi), a domain (a set) may be created that is *not necessarily bound to any specific context* and an element of the domain is picked out, that is to say, in this case, just like in the other cases, the task of the indefinite article is to locate/pick out a member of a set, but the set in this particular case is *non-pragmatically defined/delimited*. Platteau (1980) considers that, in this case, the reference of an indefinite NP must be related to *a set which is semantically defined and which can be established without any reference to the context or to the resource situation, but only on the basis of the inherent characteristics of the respective noun phrase*. To illustrate, the referential set to which the reference of *a big round box* in (17vi) must be related corresponds to the *denotation* of the noun phrase *big round box*, i.e. the set of all the

boxes that are *big* and *round*. From this non-pragmatically defined set a random member is picked out.

The general idea is that it *is not* a condition on the use of indefinite descriptions that the object depicted by it cannot exist in a shared pragmatic set (as the examples in (15-18) above show). The correct description, is that shared sets based on a common resource situation, are merely limiting cases for indefinite descriptions.

This is rendered possible by the fact that the indefinite article presupposes definite criteria of *distinctness* and *individuation* which suggest its close relationship with the numeral 'one', i.e. the indefinite article '*a(n)*' can be viewed as an unstressed variant of the numeral 'one'. Countability by means of numerals presupposes *sameness* and *individuation* and the indefinite article has retained these features. This assertion is strengthened by considering the active role of the indefinite article in the recategorization of mass-terms and proper nouns as countable nouns.

3.2 THE AMBIGUITY OF INDEFINITE DESCRIPTIONS

Ever since the first mention of indefinite descriptions in linguistic literature, it has been argued that indefinite noun phrases are *inherently ambiguous between a specific and non-specific interpretation*. In current linguistic literature this semantic/syntactic distinction is related to the *weak reading* and *strong reading* of determiners.

Weak DPs are defined by Milsark (1977) as those DPs which can be felicitously used in *existential 'there sentence'* e.g. *There is a cat/no cat/*every cat/*the/*this cat in the room*. These determiners do not *presuppose the existence* of the set denoted by the NP. They merely introduce a variable (x) (i.e. introduce new

information) in the discourse but there is no guarantee that there is a discourse referent to satisfy it. *Weak determiners may be ambiguous between a specific and a non-specific reading.* Weak determiners include: *a, one, many, much, little, some, any, no, cardinals.* Strong determiners (or rather strong DPs) are *presuppositional*, the existence of the set denoted by the noun head is *presupposed*. They always have a *specific reading*. Within the group of strong determiners we find : *the, this, every, neither, all most*. Baker (1966), who was among the first linguists to discuss this matter, remarked that the ambiguity was likely to occur in certain *linguistically specifiable contexts*; on the other hand, he observed that certain contexts were more prone to dictate one interpretation over the other.

In transparent contexts an indefinite noun phrase may establish a *permanent reference* in the discourse and may thus function as *an antecedent* for a *definite description* or for a *definite pronoun*, as in 18 (i) below, or it may function as *an antecedent* for the *indefinite pronoun* 'one' as in (18ii):

- (19) (i) *John caught a fish and ate it for dinner.*
 (ii) *John caught a fish and Susan caught one too*

In 19 (i)) the indefinite noun phrase *a fish* becomes a permanent part of the discourse and may be referred to later on in the discourse as *it* or as *the fish that John bought*. In this case we speak of '*a specific*' reading of the indefinite description, i.e. the speaker has a *particular individual* in mind and the identity of the referent is made clear to the hearer by employing certain syntactic expressions that would guarantee the *identifiability* of the referent despite the indefiniteness of the reference. Thus the definite pronoun 'it' makes it clear that John caught and ate the same individual.

In (19ii) the indefinite pronoun ‘one’ clearly indicates that John and Susan caught two different *individuals* of the set denoted by the noun phrase. In this case we speak of the ‘*non-specific*’ reading of the indefinite noun phrase. Hawkins (1978:206) remarks that ‘*if the discourse made it unambiguous for the hearer that the speaker did have a particular indefinite referent in mind, then a non-specific interpretation should be ruled out*’.

As the paraphrases in the examples below indicate, there are also other means that may be employed to make clear what reading is intended: *the specific* reading of indefinite descriptions is paraphrasable by the expression ‘*a certain...*’ while in the case of a *non-specific* reading, the expression ‘*a single*’ is possible whenever we speak of transparent contexts (i.e. there are no opacity inducing elements in the sentence):

- (20) (i) Susan played a sonata this morning
 (a) Susan played a certain sonata this morning
 (b) Susan played a single sonata this morning
 (ii) John bought a book on flowers
 (a) John bought a certain book on flowers
 (b) John bought a single book on flowers

As in the case of definite descriptions, grammarians, linguists and philosophers have noticed that it is mostly in ‘opaque’ contexts that indefinite descriptions show the ambiguity between a *specific* and *non-specific* reading. Opacity inducing elements are *quantifier-like expressions* (e.g. *every, many, etc*) *verbs* and *adjectives of propositional attitude* (e.g. *assume, believe, think, appear, seem, etc*), *emotive verbs and adjectives* (e.g. *alarm, resent, be afraid, be sorry, ...*), *modal verbs*, just to mention a few (Cornilescu (1986):

- (19) (i) John reads a book every day.
 (a) There is a certain book John reads every day.

- (b) *Every day John reads another book*
- (ii) *Mary wants to marry a Norwegian*
 - (a) *There is a certain Norwegian that Mary wants to marry.*
 - (b) *Mary wants to marry any individual who is a Norwegian.*
- (iii) *Susan is afraid to talk to a professor in the department*
 - (a) *There is a certain professor that Susan is afraid to talk to.*
 - (b) *Susan is afraid to talk to any individual that is a professor*
- (iv) *Sue may marry a Swede*
 - (a) *There is a certain Swede that Mary may marry.*
 - (b) *Sue may marry any person who is a Swede*

All the (a) sentences have a '*specific*' reading while the (b) interpretations are '*non-specific*'. In the '*specific*' interpretation (also labelled *referential* or '*presuppositional*' interpretation), the speaker has a particular individual in mind (the existence of the object is *presupposed*) about which the sentence is true. In the '*non-specific*' interpretation (also known in the literature as '*existential*' or '*non-presuppositional*') the indefinite expression merely asserts *the existence of whatever entities it applies to*, i.e. the speaker does not have a particular object in mind and *any individual* satisfying the description will do (Cornilescu (1986).

The ambiguity between a *specific* and *non-specific* interpretation of these indefinite noun phrases with these 'opaque' contexts is, roughly, the outcome of the interaction between the opacity creators (verbs and quantifiers) and the indefinite descriptions, as the disambiguating sentences in (a) and (b) above indicate. The formal explanation/analysis of such ambiguities is beyond the scope of the present lecture.

There are also contexts, such as those including verbs like *need*, *owe*, *expect*, etc. (Cornilescu 1986), or *negative contexts*, Baker (1966), that seem to favour the ‘*non-specific*’ interpretation of the indefinite expressions in direct object position, as illustrated in (20) below:

- (20) (i) *You owe me an apology. You must make *it/one rightaway*
(ii) *John needs a shirt. Give *it/one to him.*
(iii) *I expect an answer to my question. You must give me one/*it*
(iv) *Bill doesn't have a car, but he will have *it/one next summer.*

Lately, it has been noticed that there is a strong correlation between other *transitive verb types* and the interpretation of indefinite expressions in direct object position (Diesing 1992).

Verbs of *creating* (e.g. *write*, *paint*, *draw*, etc) seem to favour a ‘*non-specific*’ reading (*non-presuppositional/existential reading*) of their *indefinite direct objects*, since “*these verbs denote the bringing into existence of their direct objects and therefore are incompatible with the notion of ‘preexistence (presupposition)’*” (Diesing, 1992:111).

Experiencer verbs such as *love*, *hate*, *detest*, *appreciate*, etc, on the other hand, which constitute a special case of the so called *individual-level predicates* (predicates roughly corresponding to *permanent states*), seem to favour the ‘*specific/presuppositional*’ reading of their indefinite object noun phrases.

Indefinite object noun phrases with verbs of *using*, such as *play*, *read*, *buy*, *publish*, *comment on*, etc. seem to be ambiguous between a *specific (presuppositional)* and *non-specific (non-presuppositional)*

reading. (see example in (19i) above). This conclusion seems to be supported, according to Diesing, by the *extraction facts* from indefinite noun phrases in object position. Diesing (following a well documented literature on the problem of extraction from indefinite object noun phrases) argues that extraction from an indefinite noun phrase in object position is only possible when indefinite NPs allow for the *non-specific (non-presuppositional) reading*. Compare the examples below (examples borrowed from Diesing (1992:117):

- (21) (i) verbs of creation:
- (a) *Who did you write a book about?*
 - (b) *What did you paint a picture of?*
 - (c) *Which town did you draw a map of?*
- (ii) experiencer verbs:
- (a) **What did you like a picture of?*
 - (b) **Who did you despise a painting of?*
 - (c) **Who/What did you loathe a story about?*
- (iii) verbs of using:
- (a) *Who do you usually read a book by?*
 - (b) *Who do you usually play a sonata by?*
 - (c) *What do you usually publish a book about?*

The data in (21) show that the *wh-extractions* are grammatical **only** in a context that allows a *non-presuppositional* (i.e. non-specific) interpretation. The *experiencer verb* data show that when the *non-specific* reading of an indefinite object noun phrase is ruled out (as it is with these verbs) extraction from the noun phrase is ruled out as well. Relying on the data above, the assumption is that different types of verbs select for/favour a particular reading of the indefinite noun phrases in object position.

3.3 VALUES AND USES OF THE INDEFINITE ARTICLE

3.3.1. As already mentioned, the task of the indefinite article is to pick out an object from the set of objects denoted by the respective noun phrase construction; in the case of indefinite noun phrases the set need not be pragmatically delimited/defined.

As we have seen, indefinite descriptions may show an ambiguity between a '*specific*' (presuppositional) reading and a '*non-specific*' (non-presuppositional) reading. The example in (18a) above illustrates the '*specific/presuppositional reading*' of indefinite descriptions in which case it functions as *an antecedent* for a *definite description* or for a *pronoun*. In the '*specific*' or '*presuppositional*' reading of indefinite descriptions, *the speaker* has a certain individual (referent) in mind, excluding all other possible referents in the set denoted by the noun phrase. For *the hearer*, the identity of the referent is guaranteed by the ensuing definite description. The definite description is used '*anaphorically*' and the use of the definite article is labelled as '*anaphoric*' while the use of the indefinite article corresponds to the traditional '*epiphoric*' value. As often noticed, strong specific readings usually obtain in subject position as the example in (22i) shows. Naturally, specific readings are possible in object position as well.

Let us consider some examples in which the indefinite description functions as antecedent for definite descriptions and the indefinite article is used '*epiphorically*':

- (22) (i) *As it grew dark, a ruddy glare came out on the hill-top, and out of the glare the dimished commotion of the flare.*
- (ii) *The inspector picked up a pencil this time and ran it over the plan.*
- (iii) *Dodd picked up a small object wrapped in tissue paper and tossed it down in front of his colleague.*

- (iv) *There was just enough coincidence (to use, I am afraid, a very unscientific term) to arrest my attention and make me call for a map. And the map was suggestive enough to make me take a walk. And the walk showed me why Campbell was visiting Sir Theodore Peek at approximately the same time as the Junior Proctor was visiting the Green Horse.*
- (v) *These two men offered a contrast – the contrast not so much of generations (although Appleby was by full twenty years the younger) as of two epochs of English life.*

To the examples above we may add all the examples that illustrate de ‘anaphoric’ and ‘associative anaphoric’ use of definite descriptions.

3.3.2. Given the affinity between the indefinite article and the numeral ‘one’, i.e. the indefinite article *a/an* seems to be an unstressed variant of the numeral ‘one’ (countability by means of numerals presuppose sameness and individuation and the indefinite article has retained these features), the assumption is that the indefinite article will also be used with what is known as ‘numerical’ value. This value corresponds to the *counting function* of the *indefinite article*. As can be inferred from the paraphrases to the examples in (18), the ‘numerical/counting’ value of the indefinite article arises with the ‘non-specific’ reading of indefinite descriptions, i.e. the identity of the referent is arbitrary to both speaker and hearer, that is to say that from the semantically delimited referential set denoted by the noun phrases only one single random element is chosen. The examples below illustrate the use of the indefinite article with a ‘numerical’ value:

- (23) (i) *Mary bought ‘Syntactic Structures’ from Waterstone’s but unfortunately a page was torn.*

- (ii) *Slotwiner and Titlow were in the study with a porter to help them keep guard.*
- (iii) *We went through everything on the orchard side of those gates as if we were looking for a black cat.*
- (iv) *Appleby got painfully to his feet. The movement started a trickle of blood from the wound on his scalp; as he bent forward it ran down his forehead and dropped suddenly and sickeningly into his eyes.*
- (v) *He had learned a routine, but he was essentially untrained and unspecialized, relying upon a pithy of uncertain native shrewdness.*
- (vi) *Drawing up a chair for Appleby he placed the pile of papers between them. Both men looked at the plan in silence for a moment.*
- (vii) *I owe you an apology/I need a new summer dress*
- (viii) *Mary offered John a cigarette*

As we can notice, in all the examples above the indefinite descriptions are **not** used ‘referentially’ i.e. they do not specify any particular individual. All the indefinite noun-phrases have a *non-specific, non-presuppositional/existential* reading, the value of the indefinite article being the ‘numerical’ value.

4. GENERIC SENTENCES

4.0. *Indefinite descriptions*, along with *definite descriptions* and *bare plurals*², in their *non-specific* reading, may also occur in what is known as *generic sentences*.

² There are differences between indefinite generics and bare plural generics as will become obvious below.

For a long time, an important aspect of *generic sentences* has been related to the use of the *generic present*.

There is a very strong interrelation between the *generic interpretation* of the *noun phrases* and the *generic reading* of the *verb phrase* (ultimately the *clause/the sentence*), interrelation that will be apparent in the analysis that follows.

It is already a well-known fact that traditional grammars labelled *generic sentences* as ‘universal/eternal truths’, ‘timeless truths’ or ‘omnipresent’ sentences. What is actually meant by these ‘labels’ is the fact that they are ‘*atemporal*’, i.e. from the point of view of their time specification they do not specify a particular moment or interval of time.

Generic sentences are commonly viewed as *analytical sentences*, i.e. sentences that are true by virtue of the meaning of the terms. That means (roughly) that *generic sentences* state that a particular *property* or *relation* expressed by the predicate holds true of the entity denoted by the subject noun phrase.

Linguists (e.g. Krifka, et al. 1995:2) claim that generic sentences are ‘*true of some particular entities*³’, namely *kinds*. Hence, *genericity* can be identified with ‘*reference to kind*’ and the NPs used are *kind-referring NPs* or sometimes called *generic NPs*⁴.

³ Predications occurring with kind referring NPs are also known as ‘particular predications’

⁴ We are already familiar with the distinction made by Carlson (1977) between individuals (that may be *objects* or *kinds*) and *stages* of individuals (spatio-temporal slices of individuals). As already mentioned, *kind-level individuals* have certain peculiarities as compared to more normal individuals, i.e. kinds can be here and there (they are continuous in space, according to Zemach (1975), they are *non-sortals*), whereas normal individuals (*object-level individuals*) are generally confined to one location at a given time (they are bound in space, according to Zemach (1975), they are *sortals*).

Kind referring NPs are NPs that may co-occur with *kind-level predicates* such as: *die out*, *be widespread*, *be extinct*, *be in short supply*, etc. These *NPs* refer rigidly to a kind (an individual-level predicate) and the predicate attributes a *property* to it that cannot be distributed to the members of the kind i.e. they make *singular statements* about a particular kind. Such statements have been called *particular/proper kind predications* (PKP) (Ter Meulen, 1995: 345, Link, 1995:358)) or definite (or specific) generics (D-generics) (Krifka 1987). One important characteristic of these generic statements is that the predicate (VP) may be *progressive*, attributing a gradual change in a property to a kind (e.g. *Elephants are dying out* (Ter Meulen 1995:346)).

Kind referring expressions are *bare plurals*, *definite singular NPs* and *mass nouns*, but as the examples below indicate, **not** *indefinite NPs*, i.e. *indefinite NPs* are **not** considered *kind-referring expressions*. Nevertheless, all traditional grammars mention *indefinite NPs* as one of the three types of ‘generic noun phrases’:

- (24) (i) *The dinosaur is extinct*
 (ii) *Dinosaurs are extinct*
 (iii) **A dinosaur is extinct soon*
 (iv) *A lion has a bushy tail* *Lions have a bushy tail*
 (v) *The lion has a bushy tail*

As can be noticed from the examples above *indefinite NPs* do not co-occur with *kind-level predicates*, hence do not designate *kinds*. However, such expressions, as the example in (24iv) shows, **do** occur in *generic sentences*.

The example in (24iv) reports a kind of *general property*, i.e. a generalization based on *properties* of individual, particular lions that constitute members (object-level individuals) of the kind, and represents the second type of genericity, namely *characterizing*

sentences or simply *generic sentences*, as they express *generalizations*. Such statements are known in the literature as the *characteristic kind of predication* (CKP) (Ter Meulen 1995) or *i-generics* (i.e. indefinite/non-specific) (Krifka 1987). Other common terms for ‘characterizing sentences’ are ‘*gnomic*’, ‘*dispositional*’ ‘*general*’ or ‘*habitual*’.

Kind-denoting (generic) NPs may also occur in *characterizing sentences* (see 24 v,vi) and the sentences describe a general/essential or default property which holds for the specimens (i.e. *object level individuals*) of *the kind*. Often this is expressed explicitly by an adverbial such as: *usually*, *always*, *generally*, etc. An important property of characterizing sentences is that they may be true even when there are members of the kind which fail to have the property expressed by the predicate. Characterizing generic sentences are *stative* sentences (they may be related to *inherently stative* predicates or *derived* stative predicates (i.e. *inherently dynamic/stage level* predicates coerced into statives)).

An important distinction to be made here is that between ‘*habitual sentences*’, (see examples in (25)) which are related to *dynamic* verbal predicates (*drink, smoke, read, laugh*, etc) and *generalize over patterns of events* and the so-called ‘*lexical*’ characterizing sentences which are related to *inherently state predicates* (*know, cost, weigh, love, fear, possession have, own, etc*) and *generalize over characteristic properties* of (object-level) individuals (see 24 iv-vi).

Characterizing sentences were assumed not to express *accidental* properties (e.g. Dahl 1975 among others); they state properties that are *essential, necessary, inherent* or *analytic* (Nunberg and Pan 1975). They are not only ‘*descriptive*’ generalizations but also ‘*normative*’ ones. (Dahl 1975).

Characterizing sentences put no limitation on what types of NPs may occur in them. We can find *proper names, definite NPs*,

indefinite NPs, quantified NPs, bare plural NPs. Given the variety of NPs in characterizing sentences, the suggestion is that these type of genericity should be analyzed as a *sui generis* type of sentence. (Krifka, Pelletier, Carlson, Link, Chierchia 1995:6)

- (25) (i) My brother/Michael drinks wine with his dinner
(ii) Italians drink wine with their dinner
(iii) Every Italian drinks wine with his dinner
(iv) An Italian drinks wine with his dinner
(v) Milk is good for the bones

There are certain elements that may enforce a *characterizing*, generic reading such as adverbs like ‘*generally*’, ‘*usually*’, ‘*typically*’, ‘*often*’, ‘*sometimes*’ that lead to *lawlike* characterizing sentences.

The above discussion has attempted to stress the fact that the *locus of genericity* can be found both at the *level of the NP* and at the *level of the clause*.

With *bare plural NPs* and *definite NPs* related to kind-level predicates, the *locus of genericity* is at the level of the respective NPs, since they are *kind-referring* expressions as the examples in (24 i-ii) show; kind-referring expressions refer to a *specific* type of individual, namely kinds, hence, generic *bare plural NPs* and *definite NPs* will be interpreted as having a *specific reading*.

With *indefinite NPs* the locus of genericity is **not** in the NP but rather in the *sentence itself*, i.e. indefinite NPs cannot be considered ‘kind-referring’ or ‘generic’ in and of themselves. They get a ‘generic’ interpretation only when occurring in *characterizing* (generic) sentences. This type of genericity is independent of the verbal predicates. The term ‘generic’ sentence will be taken to refer to both types of generic phenomena, although as we have seen there are differences between the two types.

Before we embark upon the analysis of indefinite subject generics as such, we would like to say a few things about the behaviour and interpretation of 'bare plurals' i.e. noun phrases with a null determiner (\emptyset NP).

4.1. BARE PLURAL NPs

For a long time it has been assumed that bare plurals (e.g. *cats, mice, books, teachers*, etc) represent the plural equivalent of indefinite descriptions, given the similarity between the two types of noun phrases from a syntactic point of view. Despite certain parallelisms in their distribution (see below), the \emptyset NP cannot always be taken as the plural counterpart of indefinite noun phrases (a+NP), as was often assumed.

In point of their distribution, both bare plural NPs and 'a/an NP' appear in *generic sentences* (26 iii, iv) and in *predicative positions* (26 i, ii) as nominal predicates:

- (26) (i) *Tom is a dog*
(ii) *Tom and Daisy are dogs*
(iii) *Madrigals are polyphonic*
(iv) *A madrigal is polyphonic*

Moreover, both *indefinite subjects* and *bare plural NPs*, may occur with stage-level predicates; in this case, both types of NPs may have an 'existential/episodic reading' and the bare plural subject **does** have the interpretation of a *distributive plural*. Compare the following examples:

- (26') (i) *Mice are creatures (generic reading)*
(ii) *Mice will come out of the wall, if you pound on it.
(indefinite plural/existential interpretation)*

- (iii) *A mouse is a creature (generic reading)*
- (iv) *A mouse will come out of the wall, if you pound on it. (existential reading)*

The sentence in (26ii) could be paraphrased by a sentence containing the existential quantifier 'some'. Examples like the ones above have led grammarians to assuming that a *bare plural* is to be interpreted as the *indefinite plural* of *a+NP*.

From a *semantic point* of view, however, the two types of noun phrases show important differences:

(a) as we have seen, *indefinite noun phrases* are (at least) two way ambiguous in opaque contexts (in particular). *Bare plurals*, just like other noun phrases that refer to *kinds* (such as expressions including the noun 'a kind of'), *never* show any ambiguity in the context of opacity conducting elements (such as quantifiers, for instance) as the examples below indicate:

- (27) (i) *Everyone read a book on linguistics*
 - (a) *there is a certain book on linguistics that everyone read*
 - (b) *everyone read one (single) book on linguistics (not necessarily the same book)*
- (iii) *Everyone read books on linguistics*
- (iv) *Everyone read this kind of book*

(b) the bare plural fails to pick up a group that persists through time and space in its membership, just like noun phrases that include the noun 'kind' in their make-up, i.e. when bare NPs are resumed by definite pronouns, they still have a non-specific interpretation. Compare the following:

- (28) (i) *Susan is looking for a mouse, and Tom is looking for it too.*

- (ii) Susan is looking for a mouse, and Tom is looking for one too.
- (iii) Susan is looking for mice and Tom is looking for them too.
- (iv) Susan is looking for *this/some kind of animal* and Tom is looking for *it/them* too.

The sentences in (28 iii, iv) are interpreted like the sentence in (28 ii), although they employ a definite pronoun. There is no sense in which Susan and Tom are looking for the *same* group of mice. The sentences only mean that the subject NPs are both engaged in some activity of mice seeking, despite the definite pronoun in the second conjunct. (c) indefinite NPs, unlike bare plurals (and noun phrases that refer to kinds of things overtly), *do not co-occur* with what we have called *kind-level predicates* such as : *be widespread/common/extinct/indigenous to/in short supply/ everywhere, come in all sizes, etc.:*

- (28') (i) **A dog is widespread/everywhere*
 (ii) *Dogs are widespread/everywhere*
 (iii) *This kind of animal is widespread/everywhere*

The differences stated above (due to Carlson 1977) definitely show that bare plurals (\emptyset NP) can **not** be considered to constitute the plural counterpart of indefinite singulars (a NP). Instead, the plural counterpart of '*a NP*' is '*some NP*'.

Moreover, this conclusion leads to the semantic consequence that *indefinite NPs* in generic sentences and *generic bare plurals* designate two distinct entities. *Bare plural noun phrases* designate (name) *kind-level individuals* (entities that are continuous in the dimension of space and time, hence non-sortals), while *singular indefinite NPs* may designate *object level individuals* (entities that

are bound in space, hence sortals). Just as there are proper names for objects, such as Spooky, Fido, Susan etc. the 'bare plural' construction in English serves as a *proper name* for kinds.

The discussion was meant to point out the fact that bare NPs may have a generic reading as well as an existential/episodic reading. The bare plural NP is a *generic* (or *kind-referring expression*) with *individual level predicates*, even in *generic characterizing sentences* when the *bare NP* is in *subject position*. In the cases of *episodic reading* bare plurals refer to a subset of the set denoted by the head noun, i.e. members.

In what follows we shall discuss generic sentences insisting upon the generic use of the definite and indefinite article.

4.2. DEFINITE NP GENERICS

In previous chapters we have argued that definite singular NPs (definite descriptions) can be used as arguments (in subject and object positions) to refer to a particular individual. Singular definite NPs can also be used in predicative positions to predicate properties to a given referent (in so-called equative sentences): e.g. *John is the president of the club*. Definite descriptions also occur in generic sentences. They qualify as generic NPs, hence occur in particular generic sentence (*d-generics*) but may also occur in characterizing generics (*i-generics*).

Definite article generics (with the singular) pattern with bare plural generics as the example below indicates (Cornilescu 1986):

- (29) (i) *The dog is widespread/Dogs are widespread*
(ii) *The tiger is striped/Tigers are striped*
(iii) *The American has, on the average, 2 1/3 children/Americans*

- have, on the average, 2 1/3 children
- (iv) *The Italian drinks wine with every meal.*

The sentences unambiguously show that definite singular NPs are generic, kind level constructions, since they felicitously combine with kind-level predicates as the example in (29i) indicates. Just like bare NPs they may occur in *characterizing generic sentences* (of the *habitual* and *lexical* type) We may come across sentences that could be termed *definite plural generic sentences* (Cornilescu, 1986:297)), as the examples below indicate:

- (30) (i) *The airlines charge too much*
(ii) *The generals usually get their way*
(iii) *The lions are noble beasts*
(iv) *The Italians are lazy*

The assumption is that, with *definite plural NPs*, the generic interpretation is a subcase of the *collective plural reading* (e.g. see above the section on *collective nouns*). The sentence in (30iii) above would mean that there is a unique set (which is pragmatically delimited) whose members are 'lions' and also 'noble beasts'. This interpretation would account for the slight difference between *bare plural generics* and *definite plural generics*. Hawkins (1977) (apud Cornilescu 1986:298) argues that the difference between the examples in (31) is the following: 'The former is more damning than the latter. (31i) claims that laziness is an inherent attribute of Italians. By contrast, (31ii) involves a pragmatic restriction of the definite reference. *The Italians*, therefore, refers to fewer individuals than *Italians*, the determination of the reference being made relative to the world in which speaker and hearer live.'

- (31) (i) *Italians are lazy*
(ii) *The Italians are lazy*

4.3. INDEFINITE NP GENERICS

In the previous section we argued that *bare plural* noun phrases and *indefinite* noun phrases display a number of semantic differences that ultimately can be accounted for by assuming that the two linguistic expressions denote different entities, i.e. bare plural NPs are *kind level constructions* while indefinite descriptions seem to be *object level constructions*. The fact that indefinite descriptions are object level constructions is confirmed by their specific exclusion of kind level predicates, as we have already mentioned and as the examples below illustrate:

- (32) (i) **A cat is everywhere/widespread/numerous in these parts*
(ii) **A wolf gets bigger as you go north from here*
(iii) **A cat has been here since Columbus landed*
(iv) *A cat is intelligent*

The sentences in (32i-iii) above are well-formed the moment the indefinite expressions are replaced by *definite descriptions* and *bare plural noun phrases*, since these expressions are *kind-level constructions*. In these sentences we have the intuition that the truth or falsity of the statements has nothing whatsoever to do with predicating *widespread* or *everywhere*, for instance, to any *particular cats* at all. That is to say, intuitively, we *could not* paraphrase (32i) as ‘*Puffy is widespread, Duffy is widespread, therefore cats are widespread*’.

With the example in (32iv), on the other hand, where the predicate ‘intelligent’ occurs, we have the intuition that the truth or falsity of the statement somehow involves the predication of *intelligence* to particular cats. Again, in intuitive terms we might think that: ‘*Puffy is intelligent, Duffy is intelligent, etc. therefore cats*

are intelligent' is a well-formed paraphrase for (32iv). The semantic interpretation of (32iv) is: '*if x is a cat, then x is intelligent.*'

This indicates, on the one hand, that indefinite generics are *object level constructions*, and that indefinite subject generics are always *characterizing generic sentences*. Moreover, since 'intelligent' (assumed to be an *object level predicate*), can occur with bare plurals and definite descriptions, which are kind-level constructions even in characterizing generic sentences, indicates that a predicate can be 'elevated' to a predicate that applies to a higher level individual, i.e. kinds. In this case the assumption is that the *property* applies to *realizations* of the kind through the *derived* kind predication.

Another interesting problem related to indefinite subjects in generic sentences is that, when indefinite descriptions read as generic, the interpretation is always the *non-specific* one. This fact is proven by the fact that indefinite noun phrases cannot be anaphorically resumed by a definite description as the example in (33i) below indicates. *Non-generic indefinite NPs*, as we have seen, may refer to a specific individual (specific indefinites) and can be resumed by a definite description or personal pronoun as the example in (33ii) indicates:

- (33) (i) *A pork chop is tender. *The pork chop is nourishing*
(ii) *When she entered her office she saw a little man.
The little man was sitting in her armchair
scratching his nose.*

Another proof for the *non-specific reading* of indefinite generics is that they do not display any ambiguity in the context of opacity conducting elements, such as quantifiers like 'every/all' when they are related to *state* predicates (object level predicates). Compare the following:

- (34) (i) *A good teacher loves all students*
(ii) *A girl student in my class can beat every boy*

The sentence in (34i) has no interpretation in which *some specific teacher* is referred to. Comparatively, the indefinite noun phrase in the sentence in (34ii) (related to a stage-level predicate) is ambiguous between a *specific* and *non-specific* interpretation.

So far we have identified two *important properties* of indefinite noun phrases in generic sentences, namely (i) that they refer to *object level entities*, and (ii) they have *non-specific* reading. Given the non-specific reading indefinite generics only occur in characterizing generic sentences.

The *second important property* of indefinite generic NPs is that *the* generic property ascribed to an indefinite noun phrase holds by virtue of *class membership*.

Nunberg (1976) remarks that there is a restriction on the properties that are admitted in indefinite generic sentences. As already mentioned, he argues that indefinite generics may contain only such properties as can be predicated of an *object by virtue of class/kind membership*. The property may be *essential* (inherent) or *accidental* but the individual must come by it by virtue of class membership, i.e. the properties predicated are arrived at by deduction. Carlson (1989) argues that such generic statements denote 'rules' and hence are 'normative' (the deductivist point of view to the analysis of generics). According to the *deductivist, normative* point of view indefinite subject generics give *definitional properties*, which denote rules. The rule can be biological, physical, social, moral, etc. Compare the examples below:

- (35) (i) A unicorn has a single horn (essential property)
(ii) A symphony has four movements (essential property)

- (iii) A baby-sitter gets \$ 2.00 an hour (accidental property)
- (iv) A Rolls is expensive
- (v) ?A king is generous vs a king is a generous ruler
- (vi) *A madrigal is popular vs. The madrigal is popular
- (vii) A madrigal is a popular song.
- (viii) A football hero is popular

The pair of examples in (35vi) is explained by Platteau (1980) (apud Stefanescu (1988)) along the following lines: ‘popularity is a relative concept; there is always a degree of measurement implied, and therefore some set....If we say that a madrigal is popular, then this means – or we mean – that the madrigal is more popular than other sorts (i.e. kinds) of music, for example the opera or the suite. *Definite generics*, on the other hand, are *kind* denoting expressions and the sentence is well-formed since the comparison set is made up of other *kind* denoting terms like the *opera* or *the suite*. The use of the indefinite in this case is therefore non-sensical since we cannot compare any random madrigal from the set and say that it is more popular than the other madrigals that make up the set.’ The same account can be given to the example in (35, v) above.

The examples in (35 v, vi) above can be rephrased by invoking Aristotle’s observation that *definitions* are often in the form of a *genus* and a *differentia*: the *differentia* distinguishes the terms to be defined from other *species* under the same *genus*.

The examples above confirm the assumption put forth by Cristopherson (1939) and quoted by Hawkins (1978) according to which a *singular indefinite generic* still involves a reference to *one individual* as opposed to the whole class, but the very *randomness and arbitrariness* of the choice of individual means that the referent can stand as a *typical representative of its kind*. The examples point to the fact, noticed by linguists, that the generic

use of the indefinite article is not in its essence different from its 'referential (i.e. specific) non-generic use', i.e. both generic and non-generic indefinites include only *one object* in their reference and the indefinite article refers exclusively to only *one member* of the set denoted by the noun phrase (Hawkins, 1978).

There is one more problem related to indefinite generic noun phrases that we ought to mention here. As the indefinite generic NP does not allow a *particular* individual to be picked out, as indefinite subject generics denote only *normative/definitional readings* it can be easily used when the existence of individuals satisfying the description is not presupposed, that is to say generic sentences with indefinite noun phrases allow a *prescriptive* interpretation. A good example of the way in which world knowledge is used to interpret generic sentences involves contrasts like the following (Nunberg, 1976, apud Cornilescu, 1986):

- (36) (i) (a) A Christian is forgiving
(b) *?Any Christian is forgiving
(ii) (a) A Doubleday manuscript is exciting
(b) *?Any Doubleday manuscript is exciting
(iii) (a) A porkchop is tender
(b) *?Any porkchop is tender

As can be noticed, the *a-sentences* tell us only what a *Christian* or a *Doubleday manuscript* is expected to be, so that we can say of individuals that are so selected but *do not possess the requisite properties*, that they are not true Christians, i.e. these sentences allow a *prescriptive interpretation*. Basically, such noun phrases as illustrated above in the sentences under (36a) can be used when the speaker can reasonably implicate that selection for membership or inclusion in a certain class depends on the possession of the property predicated, i.e. the property predicated

is a *prerequisite to selection*, and hence holds by virtue of class/kind membership. Nevertheless, these sentences are not equivalent to sentences with the modal 'should'. Rather these sentences should be understood on the model of sentences which involve *explicitly evaluative expressions* as in the examples below:

- (37) A true christian is forgiving
 A good programmer is smart
 A good porkchop is tender
 A good king is generous

To summarize, *indefinite noun phrase generics* only occur in *characterizing generic sentences*, i.e. sentences true of the instances/realizations that make up the kind, since indefinite descriptions are *not kind-denoting* constructions. Indefinite noun phrases in generic sentences allow only a *normative, definitional* reading and are always interpreted as *non-specific*. Since they always have a non-specific reading in generic sentences they can never function as topics, i.e. they are non-presuppositional. Bare plurals and singular definite noun phrases qualify as kind-denoting generic NPs; hence they allow both *descriptive generalizations* (particular/proper kind generics) and *normative readings* in characterizing generics. The general assumption is that in the case of characterizing generics these expressions always denote *kinds*, when they are in subject position; this reading is made possible through the *derived* kind predication.

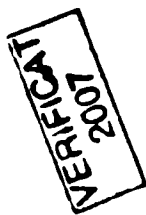
REFERENCES

- ABNEY, S., 1987, *The English Noun Phrase in Its Sentential Aspect*. MIT Dissertation, Cambridge Mass.
- ANDERSON, S., 1982, *Where is Morphology*. Linguistic Inquiry 13, 571-612.
- ANDERSON, S., 1992, *Amorphous Morphology*, Cambridge University Press.
- BAKER, C.L. 1966, *Definiteness and Indefiniteness in English*. MA Dissertation, University of Illinois.
- BAKER, M., 1985, *The Mirror Principle and Morpho-Syntactic Explanation*. Linguistic Inquiry 16, 373-416.
- BARWISE, J. & PERRY, J., 1983, *Situations and Attitudes*. MIT Press, Cambridge, Mass.
- BORER, H., 2003, *Exo-Skeletal vs Endo-Skeletal Explanations: Syntactic Projection and the Lexicon*. to appear in *Explanation in Linguistics*.
- BORER, H., 2004, Forthcoming. *Structuring Sense. An Exo-Skeletal Trilogy. Book I. In Name Only*.
- CARLSON, G., 1977b, *Reference to Kinds in English*. PhD Dissertation, Amherst, Mass. Published 1980, Garland Press, New York.
- CARLSON, G., 1977a, *A Unified Analysis of the English Bare Plural*. Linguistics and Philosophy 1, 413-456.
- CARLSON, G., 1995, *Truth Conditions of Generic Sentences: Two Contrasting Views*. In G. N. Carlson and F. J. Pelletier, eds. *The Generic Book*, The University of Chicago Press, 224-237.
- CHIERCHIA, G. 1995, *Individual-Level Predicates as Inherent Generics*. In G. N. Carlson and F. J. Pelletier, eds. *The Generic Book*, The University of Chicago Press. 176-223.
- CHOMSKY, N., 1965, *Aspects of the Theory of Syntax*. MIT Press, Cambridge, Mass.

- CHOMSKY, N., 1975, *Reflections on Language*. Pantheon Books.
- NYCHOMSKY, N. 1986, *Knowledge of Language. Its Nature, Origin and Use*. Praeger, New York.
- CHOMSKY, N., 1995, *The Minimalist Program*. MIT Press, Cambridge, Mass.
- CORNILESCU, A. & CHITORAN, D., 1986, *Elements of English Sentence Semantics*. Bucharest University Press.
- CORNILESCU, A. & CHITORAN, D., 1985, *Elements of English Sentence Pragmatics*. Bucharest University Press.
- CORNILESCU, A., 1995, *Concepts of Modern Grammar*. Editura Universitatii Bucuresti.
- CORVER, N. & RIEMSDIJK, H., 2001, *Semi-Lexical Categories*. Corver, N. & Riemsdijk, H. Studies in Generative Grammar 59: Semi-Lexical Categories. The Function of Content Words and the Content of Function Words, 1-23. Mouton de Gruyter Berlin, New-York.
- CURME, G., 1947, *English Grammar*. Burnes and Noble, New York, 1964.
- DECLERCK, R. 1986, *Two Notes on the Theory of Definiteness*. Journal of Linguistics 22, 25-41.
- DONELLAN, K., 1966, *Reference and Definite Descriptions*. Philosophical Review 75, 281-304.
- DIESING, M., 1992, *Indefinites*. MIT Press, Cambridge, Mass.
- DOBROVIE-SORIN, C. & LACA, B. 1996, *Generic Bare NPs* ms., Universite Paris 7 and Universite de Strasbourg.
- DOWTY, D., 1979, *Word Meaning in Montague Grammar*. D. Reidel, Dordrecht.
- DUTESCU-COLIBAN, T., 1983, *Grammatical Categories of English*. Bucharest University Press.
- EMONDS, J., 1985, *A Unified Analysis of Syntactic Categories*. Foris, Dordrecht.
- FARKAS, D., 1975, *A Semantic and Syntactic Classification of the English Noun Phrase*, MA Dissertation, Bucharest University.
- FRIES, C. 1952, *The Structure of English*. Harcourt, Brace and World, New York.
- HALLE, M., 1973, *Prolegomena to a Theory of Word Formation*. Linguistic Inquiry 4, 3-16.
- HALLE, M. & MARANTZ, A., 1993, *Distributed Morphology and the Pieces of Inflection*. In Hale, K and Keyser, J. eds. 111-176.
- HARLEY, H., 2003, *A Linguistic Introduction to Words*, chapter 5.
- HARRIS, Z., 1959, *Methods in Structural Linguistics*. University of Chicago Press, Chicago.

- HAWKINS, J. A., 1978, *Definiteness and Indefiniteness*, Croom Helm, London.
- HEIM, I. 1982, *The Semantics of Definite and Indefinite Noun Phrases*. Ph.D. Dissertation, University of Mass., Amherst.
- HORNBY, A. S., 1977, *The Advanced Learner's Dictionary of Current English*. Oxford University Press.
- ISAC, D., 1989, ms. *A Semantic Analysis of Indefinite NPs in English*, MA Dissertation. Bucharest University.
- JACKENDOFF, 1975. *Morphological and Semantic Regularities in the Lexicon*. *Language*, 51, 639-71.
- JESPERSEN, O., 1933, *Essentials of English Grammar*. George Allen and Unwin Ltd. London, 1969.
- KRATZER, A., 1995, *Stage-Level and Individual-Level Predicates*. In G. N. Carlson and F. J. Pelletier, eds. *The Generic Book*, The University of Chicago Press, 176-224.
- KRIFKA, M., 1995, *Focus and the Interpretation of Generic Sentences*. In G. N. Carlson and F. J. Pelletier, eds. *The Generic Book*, The University of Chicago Press, 238-265.
- KRIFKA, M et al. 1995, *Genericity: An Introduction*. In G. N. Carlson and F. J. Pelletier, eds. *The Generic Book*, The University of Chicago Press, 1-125.
- LINK, G. 1995, *Generic Information and Dependent Generics*. In G. N. Carlson and F. J. Pelletier, eds. *The Generic Book*, The University of Chicago Press, 358-382.
- LONGMAN DICTIONARY OF CONTEMPORARY ENGLISH, New Edition, Clays Ltd. England, 1991.
- LYONS, J., 1968, *Introduction to Theoretical Linguistics*, Cambridge University Press.
- LYONS, C. G., 1975, *Deixis as the Source of Reference*, In Keenan ed. 61-83.
- MILSARK, G., 1974, *Existential Sentences in English*. Ph.D. Dissertation, Cornell University.
- MEULEN, A., 1995, *Semantic Constraints on Type-Shifting Anaphora*. In G. N. Carlson and F. J. Pelletier, eds. *The Generic Book*, The University of Chicago Press, 339-358.
- NUNBERG, G., 1976, *Iferring Quantification in Generic Sentences*. CLS 12.
- PAYNE, J. & HUDDLESTONE, R., 2002, *Cambridge Grammar of Contemporary Grammar*. Cambridge University Press.
- PELLETIER, F. J., 1979, *Mass Terms: Some Philosophical Problems*. Reidel Publishing Company, Dordrecht.

- PLATTEAU, F., 1980, *Definite and Indefinite Generics*. In John van der Auwera, ed.
- QUINE, W. V., 1960, *Word and Object*. MIT Press, Cambridge, Mass.
- SPEAS, MARGARET, 1991, *Functional heads and inflectional morphemes*, The Linguistic Review 8, 389-417.
- ȘTEFĂNESCU, I., 1986, *English Morphology*, vol. 2. Editura Universității București.
- ZEMACH, E. 1979, *Four Ontologies*. In Pelletier, F. J. ed



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